

Appalachian State University

Graduate Catalog



1973-74



Academic Calendar for 1973-74

Fall Quarter 1973

SEPTEMBER						
S	M	T	W	T	F	S
	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
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29	30					

OCTOBER						
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NOVEMBER						
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- Sept. 4 Tuesday, 8:00 a.m.—Official opening, dormitories open.
 Sept. 6-7 Thursday and Friday—Registration (Weekend College registration begins on Friday evening).
 Sept. 8 Saturday—Registration and first meetings of Saturday classes.
 Sept. 10 Monday—Classes begin.
 Sept. 14 Friday—Last day to register for a class.
 Sept. 19 Wednesday—Fall quarter faculty meeting at 5:00 p.m. in I. G. Greer Auditorium.
 Oct. 8-12 Mid-term week.
 Nov. 14 Wednesday—Classes end.
 Nov. 15 Thursday—Reading day.
 Nov. 16-21 Friday-Wednesday noon—Final examination period.
 Nov. 21-25 Thanksgiving holiday and quarter break.

Winter Quarter 1973-1974

DECEMBER						
S	M	T	W	T	F	S
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JANUARY						
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FEBRUARY						
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- Nov. 26-27 Monday and Tuesday—Registration.
 Nov. 28 Wednesday—Classes begin.
 Dec. 1 Saturday—Registration and first meetings of Saturday classes.
 Dec. 4 Tuesday—Last day to register for a class.
 Dec. 19 Wednesday, 8:00 a.m.—Christmas holiday begins.
 Jan. 3 Thursday, 8:00 a.m.—Classes resume.
 Jan. 14-18 Mid-term week.
 Feb. 20 Wednesday—Classes end.
 Feb. 21 Thursday—Reading day.
 Feb. 22-27 Friday-Wednesday noon—Final examination period.
 Feb. 27- March 3 Wednesday-Sunday—Quarter break.

Spring Quarter 1974

MARCH						
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APRIL						
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MAY						
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- March 4-5 Monday and Tuesday—Registration.
 March 6 Wednesday—Classes begin.
 March 9 Saturday—Registration and first meetings of Saturday classes.
 March 12 Tuesday—Last day to register for a class.
 April 4-10 Mid-term week.
 April 11-15 Thursday, 8:00 a.m.—Monday—Easter holiday.
 April 16 Tuesday, 8:00 a.m.—Classes resume.
 May 18 Saturday—Classes end.
 May 20-23 Monday-Thursday—Final examination period.
 May 26 Sunday—Commencement.

Summer Quarter 1974

June 10-August 16 Summer Sessions

APPALACHIAN
STATE UNIVERSITY
GRADUATE BULLETIN

Announcements for
1973-1974

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June, 1973

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Appalachian
State University

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Beginnings and Evolution



Issued Six Times a Year By The
Appalachian Training School

DEW DROP

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VOL. XXI

BOONE, N. C., MAY, 1924

No. 1



WATAUGA ACADEMY



The first men who came to the beautiful mountain frontier of Northwestern North Carolina found the going rough. A diary kept during the first known expedition into the area stated: "Part of the way we had to crawl on hands and feet; sometimes we had to take the baggage and saddles off the horses and drag them up the mountain, for the horses were in danger of falling backwards—as we had once an experience and sometimes we had to pull the horses up while they trembled and quivered like leaves."

When the first explorers reached the summit of the magnificent Blue Ridge Mountains, where a twig placed in a certain bubbling, cold, clear stream would drift either toward the Atlantic or the Mississippi, the explorers stood and marveled at the "hundreds of mountain peaks all around," which presented a "spectacle like ocean waves in a storm."

The area was first settled by English-speaking hunters. The first dwelling in Boone was a hunting cabin of a man named Benjamin Howard. That goes back to 1769. The cabin stood on what is now the Appalachian State University Campus. Daniel Boone used the cabin as a base for some eight years before he finally crossed the "great Appalachian barrier" and pushed on westward into Tennessee and Kentucky.

Benjamin Howard sided with the British during the Revolution, and he hid during the Revolutionary times from the patriots on a high knob above what was to become Boone (the knob became Howard's Knob). Howard later made peace

with the patriots. The settlers who came after the Revolution were English, Scotch-Irish, and German. As the frontier moved forever westward, many crossed over the mountains.

Some stayed. They kept the proud, resourceful, rugged ways needed to survive in the beautiful, yet often hostile environment. The area was known as "the Lost Provinces," and for good reason. None but the very determined could make it up where the high meadows lay against the sky. The railroad came in 1899 and truly good roads were not built until the 1940's.

For a long time in the area, formal education was carried out, weather permitting, after the fall crops were in until it was time to plow. Education was, at best, minimal. In 1899, a two-story frame structure was built in Boone, a town of 200 persons. The people of the local community contributed labor, materials and \$1,100 to start a school—known as Watauga Academy. It offered instruction in grades one through 11 and in teacher training. Three courses were offered: Common School, Academic, and Two Years' Collegiate.

An institute always was held during the summer for teachers. Pupils received instruction on how to teach, thus making their work more enjoyable to them and more beneficial to the students, and they would be taught and coached in the very subjects upon which they would have to take an examination to renew their certificates or to raise them to the highest grade—The First Grade Certificate.

Watauga Academy grew steadily. In the winter of 1902 more than 100 pupils were enrolled, and 90 percent of those were grown people.

Despite all the progress made, Watauga Academy "rested upon a precarious and almost starvation financial foundation." The founders of the academy, the Dougherty brothers, D.D. and B.B., realized that without adequate financial support the academy would never be able to train enough teachers needed in the area. They turned to the state for help.

On a cold January morning in 1903, with a temperature of eight degrees, B. B. Dougherty started out for Lenoir on the family horse, and then continued by train for the capital city of Raleigh. In his pocket he carried a bill proposing a state institution for Northwestern North Carolina.

Dougherty encountered initial opposition for his proposal. The plight of the extreme northwestern edge of the state was not appreciated by some of the leaders of the day. Undaunted, Dougherty sought an appeal before Governor Charles B. Aycock, known as "the Education Governor." In the privacy of the Governor's office, Dougherty pointed out that the "Education Governor" could ill afford to oppose a bill that promised so much for the teacher. He reminded the Governor that he had boasted the building of a new schoolhouse every time the sun set since being elected and that certainly there was no need for a schoolhouse without a place to train the teacher.

Aycock pledged his support, and Dougherty appeared before the House Committee on Education. Dougherty told the committee that the legislature had helped other sections of the state and it should help Northwestern North Carolina. He asked for only small appropriations, as the local people were willing to match state funds dollar-for-dollar.

Among the reasons given why teachers in Northwestern North Carolina could not attend the schools already established, Dougherty said, was that the salary of the teachers in the mountains was too low to allow them to attend a school where expenses were high; mountain people could not endure a summer in the heat of the flatlands; and the university professor would take little interest in the unsophisticated country teacher.

The bill was introduced into the House by the Honorable W. C. Newland of Lenoir. Joining with Newland was the Honorable R. A. Doughton who brought with him the prestige of his unexcelled reputation for wise statesmanship. Support also was given by senators from Cleveland, Franklin, and McDowell counties. The enabling bill passed by one vote more than needed for the two-thirds majority. Just before the measure came up, however, Mr. Newland suddenly notified two

senators that they had other pressing "engagements." How they would have voted had they been present is not recorded.

In chartering a training school for teachers, the state pledged \$2,000 annually for maintenance and \$1,500 to be appropriated for buildings when a like amount was paid by private contributions. Tuition was to be free to those who pledged themselves to teach in the public schools of the state for two years.

The Doughertys won a major political and educational victory for the mountain region when, by a one-vote margin, the 1903 General Assembly created Appalachian Training School. Its just-appointed trustees met in Blowing Rock three months after the vote and heard representatives of several mountain counties and towns who spoke in behalf of locating the institution in their area. According to the minutes of the board, Boone offered the facilities of the academy as a home for the state school, and it was declared to be Appalachian's permanent location.

The board elected B. B. Dougherty as superintendent of the school, and his brother was named principal. They served under those titles and guided the school as it grew with the state system until 1921 when Superintendent Dougherty was named President, and Principal Dougherty was named Treasurer and Business Manager.

The Assembly changed the name of the institution to Appalachian State Normal School in 1925. In 1929 it became Appalachian State Teachers College. The enabling act which changed the name of the institution also authorized the conferring of college degrees.

Modest graduate programs began at the college in 1943, and in 1949 Appalachian's graduate school was sanctioned by the American Association of Colleges for Teacher Education.

It was not until 1957 that legislation was enacted to give Appalachian permission to depart from its single-purpose role as a teacher-training institution. In 1965 the institution activated programs that led to nonteaching degrees.

The next milestone in the evolution of the institution came in 1967 when Appalachian was designated a regional university. Its purpose was set forth by the 1969 General Assembly as follows:

“The regional universities shall provide undergraduate and graduate instruction in the liberal arts, fine arts, and sciences, and in the learned professions, including teaching, these being defined as those professions which rest upon advanced knowledge in the liberal arts and sciences, pure and applied. The regional universities shall provide other undergraduate and graduate programs of instruction as are deemed necessary to meet the needs of their constituencies and of the State. Regional universities insofar as possible shall extend their educational activities to all persons of the State who are unable to avail themselves of their advantages as resident students by means of extension courses, by lectures, and by such other means and methods as may seem to the boards of trustees and administrative officers as most effective.”

In 1971, the structure of higher education in North Carolina was consolidated into a 16-member University of North Carolina system, efforts for which Appalachian supported.

The University of North Carolina

The University of North Carolina was chartered in 1789 and opened its doors to students in 1795. It has been governed by a Board of Trustees chosen by the legislature and presided over by the Governor. During the period 1917-1972, the Board consisted of 100 elected members and a varying number of ex officio members.

By act of the General Assembly of 1931, without change of name, it was merged with The North Carolina College for Women at Greensboro and The North Carolina State College of Agriculture and Engineering at Raleigh to form a multicampus institution designated The University of North Carolina.

In 1963 the General Assembly changed the name of the campus at Chapel Hill to The University of North Carolina at Chapel Hill and that at Greensboro to The University of

North Carolina at Greensboro and, in 1965, the name of the campus at Raleigh to North Carolina State University at Raleigh.

Charlotte College was added as The University of North Carolina at Charlotte in 1965, and, in 1969, Asheville-Biltmore College and Wilmington College became The University of North Carolina at Asheville and The University of North Carolina at Wilmington, respectively.

A revision of the North Carolina State Constitution adopted in November, 1970 included the following: "The General Assembly shall maintain a public system of higher education, comprising The University of North Carolina and such other institutions of higher education as the General Assembly may deem wise. The General Assembly shall provide for the selection of trustees of The University of North Carolina. . ." In slightly different language, this provision had been in the Constitution since 1868.

On October 30, 1971, the General Assembly in special session merged, without changing their names, the other ten state-supported senior institutions into the University as follows: Appalachian State University, East Carolina University, Elizabeth City State University, Fayetteville State University, North Carolina Agricultural and Technical State University, North Carolina Central University, North Carolina School of the Arts, Pembroke State University, Western Carolina University, and Winston-Salem State University. This merger became effective on July 1, 1972.

The Board of Trustees became the Board of Governors and the number was reduced to 35 members (32 after July 1, 1973) elected by the General Assembly. It is "responsible for the general determination, control, supervision, management, and governance of all affairs of the constituent institutions." However, each constituent institution has a local board of trustees of 13 members, eight of whom are appointed by the Board of Governors, four by the Governor, and one, the elected president of the student body, whose principal powers are exercised under a delegation from the Board of Governors.

Each institution has its own faculty and student body, and each is headed by a chancellor as its chief administrative officer. Unified general policy and appropriate allocation of function are effected by the Board of Governors and by the President with other administrative officers of the University. The General Administration office is located in Chapel Hill.

The chancellors of the constituent institutions are responsible to the President as the chief administrative and executive officer of The University of North Carolina.

Purpose

Within the framework of higher education established by the state of North Carolina, Appalachian State University is dedicated to the total development of its constituency through instruction, research, and service.

In pursuit of this purpose, Appalachian pledges itself:

- To nurture an intellectual climate in which truth is sought and respected.

- To provide a liberal education for all its students.

- To offer, within the scope of its programs, preprofessional and professional education to those students who desire it.

- To maintain a faculty dedicated to teaching and scholarship.

- To advance the frontiers of knowledge through research.

- To be cognizant of new knowledge and prepared to meet the challenge of new ideas.

- To expand cultural horizons and develop appreciation of ethical and aesthetic values.

- To make its resources available to the people within its sphere of influence.

- To serve as a force for social improvement.

- To cooperate with all institutions and agencies which are dedicated to the betterment of mankind.

Accreditation

The university is an accredited member of the Southern Association of Colleges and Secondary Schools, the National Council for Accreditation of Teacher Education, the American Association of Colleges for Teacher Education, the American Council on Education, the Council of Graduate Schools in the United States, the North Carolina Association of Colleges and Universities, the National Association of Schools of Music, the American Association of University Women, the National Association of Business Teacher Education, and the American Association of State Colleges and Universities.

The Campus

Appalachian's facilities include some 43 buildings located in its 75-acre main campus, as well as the new Center for Continuing Education and Mountaineer Apartments, the new married student housing, on the 180-acre new west campus area (see campus map).

During the decade of the 60's, enrollment tripled at Appalachian, leading to construction of some 30 new major buildings and a complete change in the campus.

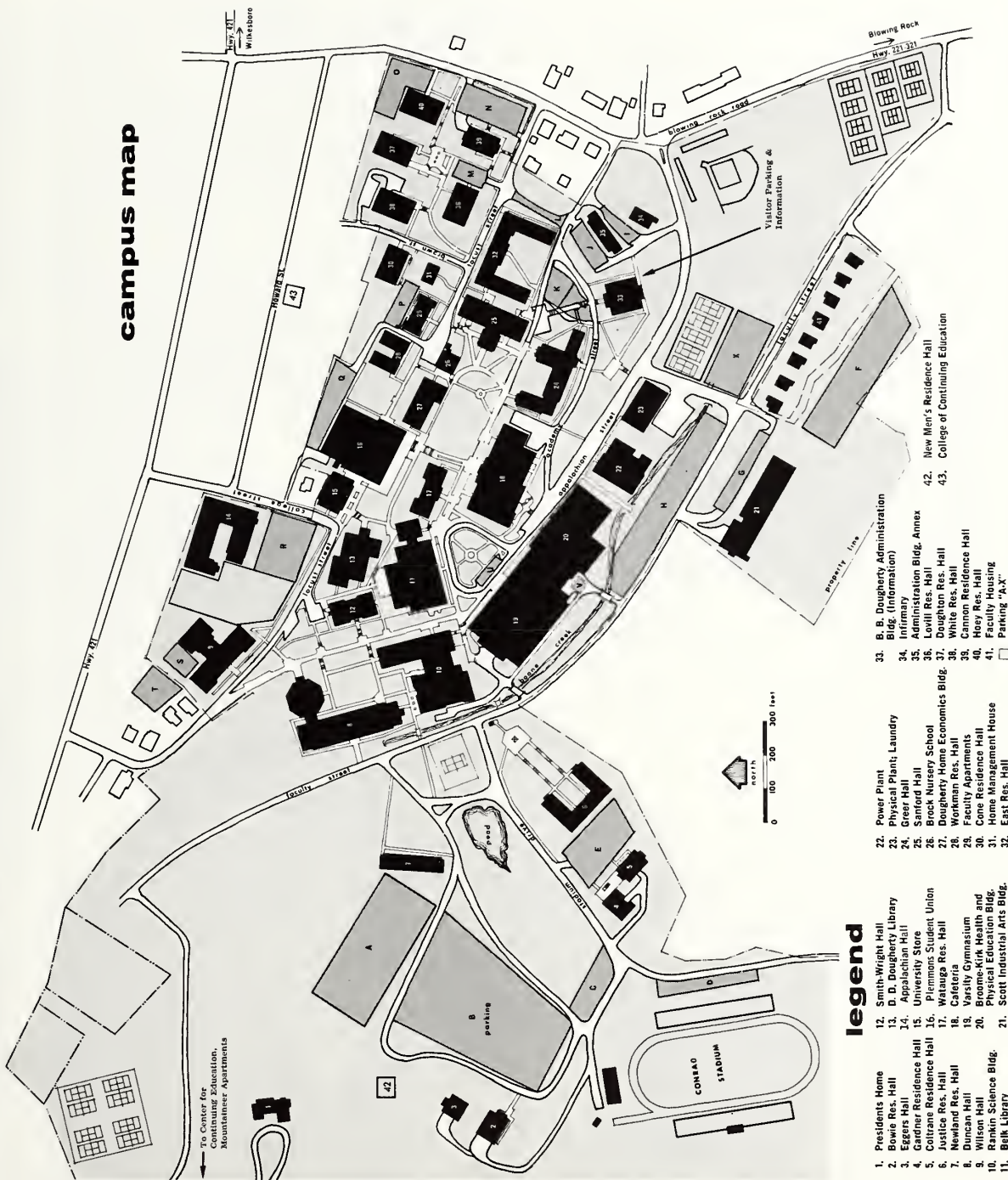
The university is on schedule for its master plan for an enrollment of 10,000 students. Future expansions will be concentrated on some 330 acres of outlying lands owned by the university, of which the new west campus area is a part.

The university welcomes and encourages prospective students, educators, alumni, and other friends to visit and tour the campus. Tours can be arranged through the Admissions Office.

The Area

The Watauga-Avery County area is rapidly becoming the most popular year-round living-vacation area in the East.

campus map



Boone, at 3,333 feet, is located in the heart of the Blue Ridge Mountains. The town of 8,754 grew some 137.75 percent during the 60's and Watauga County, of which Boone is the county seat, grew 33.5 percent during the decade. The area can make claim to being one of the few unspoiled areas in the Eastern United States. The Blue Ridge Parkway is some six miles from campus. The average summertime temperature is 69 degrees and the day-time highs average in the low-to-mid 70s. Mount Mitchell, the highest point in the Eastern United States is some 40 miles away. Within a half-hour's drive of the campus are some six ski slopes, seven golf courses, and four major tourist attractions. The area is renowned for its beautiful native crafts and art forms and for fishing, hunting, camping, hiking, and nature trails.

Student Life





There's always something to do at Appalachian—both off and on campus. For openers, the Boone-Blowing Rock-Linville-Banner Elk area can make claim to being the most popular year-round vacation-recreation area in the South. Things are great on campus, too.

Student life policies at Appalachian have long been based on the premise that, as adults, students have the intelligence and maturity to properly direct most things for themselves and that the role of the university is to provide opportunities for growth and development in many ways other than in the classroom.

A Voice In Policy

Higher education conducts its internal business, makes its policies, and settles its differences, slowly, in a detailed structure of committees. At many schools they are done by faculty committees, but at Appalachian they are faculty-student-staff committees. Students are nominated for committee membership by the Student Senate. A student's vote carries the same value as that of a faculty member's, and in some cases, you may find students serving as chairmen of what formerly were faculty committees. Students now serve with their professors on committees for academic policy, admissions, business affairs, public programs, institutional research, public service, registration and calendar, research, student life, and traffic and campus management.

Student Development Center

As concrete evidence that the student is the most important being at Appalachian, the university has created an innovative Student Development Center. There a full-time director and his staff work.

Take, for example, the Student Research Union, a product of student ingenuity to which the Student Development Center lends technical assistance and advice. It investigates the hottest issues on the campus and publishes reports which lay facts before the student body. The union has probed questions ranging from the operation of the campus traffic office to policies and pricing in the campus bookstore. Student members of the Student Research Union figure that they are one of the prime reasons that Appalachian has peace within its own walls. It is hoped that by reducing secrets between administrator and student the causes for unrest and dissatisfaction are reduced.

Another agency under the administrative umbrella of student development is the Student Employment Service. This group contacts businessmen in the community and surrounding areas and arranges part-time jobs for students who cannot find enough employment on the campus.

Student development personnel also assist in the mammoth publications job which students carry out. The director serves as advisor to *THE APPALACHIAN*, the *RHODODENDRON*, and *VERVE*. In addition to the major publications, the staff gives advice and technical assistance to Student Printing Service, Student Photographic Service, and Student Typesetting Service. Student government leaders can go to the student development staff for help in their normal routines or for assistance in developing new governing procedures for the student body.

W. H. Plemmons Student Union

The Plemmons Student Union is the focal point of campus student activities. Facilities and activities are provided for all members of the university who wish to pursue social, cultural, and recreational activities.

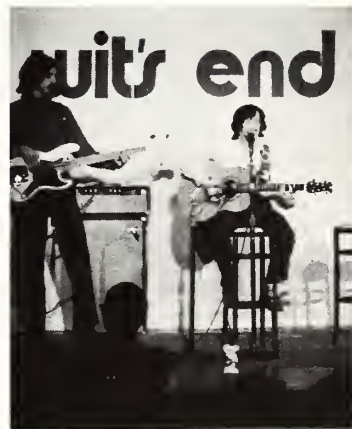
The program of the student union is the responsibility of the Student Center Board. The board is chaired by a student and is composed of students, staff, faculty, and administrative members. The program of the student center includes cultural, educational, and popular films which are selected and scheduled by the film committee. The Fine Arts Committee sponsors an annual Student Art Contest with purchase prizes in several categories. These works become part of the permanent Student Art Collection and are used to decorate many areas of the building. Several traveling and individual art shows are displayed annually in the Skylight Lounge.

Services provided in the center include a television lounge, meeting rooms, table tennis room, music listening area, reading lounge, and a bowling and billiard area. Information desk hostesses direct building utilization and supply information concerning all campus activities during the normal 16-hour day, seven-day week the center is open.

A program of regular nightly coffeehouse entertainment is sponsored in the Wit's End by the Coffeehouse Committee. These shows range from local talent shows to professional touring entertainment.

As members of the Association of College Unions International, members of the Student Center Board have been active in the Region V Annual Student Conference where yearly plans are made and program innovations are discussed.

The Recreation Committee encourages local competition in bowling, billiards, bridge, table tennis, and chess. There are divisions for both men and women and the local winners are sponsored in a five-state regional competition. A traveling bowling team and several bowling leagues are sponsored annually.



Cultural Opportunities

With speakers such as Ralph Nader, Eric Hoffer, John Ciardi, Betty Friedan, and Muhammad Ali, with groups such as the National Players, the Houston Ballet, and the Atlanta Symphony, and with outstanding films, there is some cultural offering on the Appalachian campus practically every day of the school year. Whether it is under sponsorship of the university's Artists and Lecture Series or not, the university campus makes a contribution to student life and to the region by offering programs that are a part of our cultural heritage.

Through the Office of Student Affairs, a member of the faculty serves as Director of Cultural Affairs. He works constantly to promote the cultural arts on campus. He directs the university's Artists and Lecture Series, stimulates and coordinates the efforts of persons who are working to improve the cultural atmosphere on campus, and prepares grant proposals in the area of the cultural arts. He works with student groups in planning cultural affairs and promotes other special cultural projects.

Campus Entertainment

The Appalachian student hears them all—the Carpenters, Jose Feliciano, the Fifth Dimension, Three Dog Night, Blood Sweat and Tears, Hamilton, Joe Frank and Reynolds, and the Beach Boys.

The student body at Appalachian is large enough to support an almost weekly array of professional entertainment in concert, in person. The groups above appeared here and did their thing before audiences in ASU's 8,000-seat Varsity Gym. The shows are staged by the Student Government Association's Popular Programs Committee.

The university's social calendar also includes formal and informal dances and parties.



Student Publications

Appalachian students have proven that the imagination is the only limit when they are given responsibility in student publications. They publish a completely uncensored student newspaper, *The Appalachian*, often 12 to 14 pages, twice a week. With purchased typesetting equipment, the students set their own copy, set their own headlines, paste up the pages of the newspaper, and carry it, "camera ready," to an off-campus printer. The job they do is highly professional, and because of what they're learning after classes, some have stepped into professional lithographic jobs with little additional training.

The university's yearbook, *The Rhododendron*, is similarly composed on the campus and taken to the professional printer only when it is ready to be printed. *Verve*, a student-written literary magazine, is another of their respected products.

Clubs, Societies, and Performing Activities

There are some 70 different student organizations and clubs on the campus, including four recently recognized fraternities (three nationals) and one sorority. The clubs range from service orders to scholastic honoraries. All student organizations on the campus are chartered and supervised by the Student Government Association and the School Council. Opportunities also are available in areas such as debate, theater, broadcasting, and music. Consult the student handbook, *The Mountaineer*, for a complete listing and description of activities.

Religious Life

Appalachian is a state-owned campus. As such it has no religious affiliation. Its students, however, promote and support church affiliated organizations which include the Baptist Student Union, Canterbury Club, Lutheran Student Association, Newman Club, Wesley Foundation, and Westminster Fellowship. Eight churches (Advent Christian, Baptist, Catholic, Church of Christ, Episcopal, Lutheran, Presbyterian, and United Methodist) are within walking distances of the campus.

Athletics and Intramural Sports

As a new member of the Southern Conference and the National Collegiate Athletic Association (NCAA), Appalachian offers 13 varsity sports for men and seven varsity sports for women—the largest number of varsity athletic teams of any Southern Conference school and as many varsity teams as any school in the state. Men's varsity sports include: football, cross country, soccer, basketball, wrestling, rifle, swimming, gymnastics, fencing, track (indoor and outdoor), tennis, baseball, and golf. Women's varsity sports include: field hockey, basketball, volleyball, gymnastics, swimming, golf, and tennis.



The Mountaineer tradition, in every respect, is a winning tradition. The Apps have finished with winning records in 30 of 43 football seasons, and ASU varsity teams have a combined 945-700-26 won-lost record during the past 13 years.

The university also encourages students to participate in a program of intramural sports. Some 2,200 did last year, in 25 different sports. Many of the intramural and varsity sports contests are staged in Conrad Stadium, the first artificially-turfed athletic facility in the state. Men's intramural sports include: flag football, basketball, badminton, tennis, softball, cross country, volleyball, handball, paddleball, squash, soccer, swimming, track and field, horseshoes, and wrestling. Women's intramural sports include: flag football, basketball, badminton, tennis, softball, volleyball, and swimming. Co-educational intramural sports include: tennis, volleyball, and badminton.

Student Housing

The university has 15 modern residence halls housing some 4,000 students in a living and learning atmosphere. The quality of residence hall life is of as much concern to the university as the quality of any academic program.

To insure that quality, some changes have taken place recently in the dormitories. What used to be stark dorm lobbies are now coeducational lounges. There are specially prepared

study areas and seminar rooms in the dorms now—so that some of the academic life of the campus can take place in the dormitory setting.

As you live in a residence hall, the university will try to help you develop an understanding of group living, a consideration for others, and an ability to live with people who are different from you.

The halls are staffed and supervised by professional personnel who are trained to create a friendly atmosphere in which students can enjoy life and feel a part of the university community.

Each room is equipped with the basic furniture, but you are expected to supply linens, blankets, rugs, pillows, curtains, and other personal furnishings according to individual taste.

Some appliances are allowed in the dorm room (lamps, small television sets, fans, small refrigerators, not to exceed .45 amps), but others are not (hot plates, toasters, percolators, heat lamps, roasters, and heaters). Popcorn poppers may be used only in kitchen areas. Your *Student Support Services Handbook* and *The Mountaineer* contain specific regulations and policies which govern residence hall life. Each student is responsible for knowing these regulations and conducting himself accordingly.

Housing Requirements

The residence halls are closed during vacation periods, and no occupancy of rooms will be permitted during this time. For those who must remain in Boone during a vacation period, the Dean of Students offers assistance in securing a room.

All freshmen (and all sophomores beginning in the fall of 1974) are required to live in university-owned housing with the exception of those students living with parents or guardian or those who are married and maintaining their residence near the university.

All students reserving rooms are subject to an academic year housing agreement (three academic quarters). Students who reserve a room for the fall or winter quarter are obligated to pay room rent for the subsequent quarters of that academic year as long as they are enrolled. Exceptions are made during the term of the housing agreement for students participating in off-campus field service programs and those students getting married during the term of the agreement.

If a residence hall student plans not to enroll for a subsequent quarter, he must notify the housing office at least two weeks prior to examination week. If he does not give such notification, he will be billed for a quarter's room rent.

Unless a student notifies the housing office that he will be late, he must occupy his dormitory room by the night of the first day's classes in each quarter. Otherwise, the reservation for this space will be canceled, and he will be billed for a quarter's rent. Limited exceptions to these rules appear in the *Student Support Services Handbook* and in the student handbook, *The Mountaineer*.

Room Reservations

Room reservation forms are mailed to new students following admittance by the Office of Admissions. Returning students may apply for housing during spring quarter for the following year. Former students who have been readmitted may apply for housing directly to the Office of Housing Operations. Completed forms should be returned to the university cashier with a check for reservation deposit payable to Appalachian State University. The reservation deposit is deducted from the room rent charged for the first quarter in residence.

Mountaineer Apartments

The university provides 90 furnished apartments, including drapes, built-in self-cleaning ranges, frost-free refrigerators, and wall-to-wall carpeting. Rental information and applications may be obtained at the Office of Housing Operations. The housing apartments are available to married students and their dependents and widowed or divorced students with children.

Off-Campus Housing

An Approved Rental Housing Association is sponsored by housing officials at Appalachian. The association is composed of landlords who operate their complexes within the bylaws of the association. A current listing of approved off-campus housing is published and made available weekly by the housing office.

The Office of Housing Operations provides a computerized current listing of rental housing for student teachers and students participating in field service programs off campus.

Fair Housing Discussion Board

A Fair Housing Discussion Board sponsored by the Office of Housing Operations and the Student Government Association meets monthly to discuss various topics relating to off-campus housing. Topics for discussion should be submitted to the Secretary of Commuter Affairs.



University Services



University Medical Services

Appalachian maintains a modern medical center on campus. It is staffed by one full-time and one half-time physician, six registered nurses, a lab and X-ray technician, and their assistants. For overnight treatment of minor illness there is a 14-bed infirmary. For those who require hospital care, the modern Watauga Hospital is just two miles from campus.

Services of the medical center are open 24 hours a day to all students when the university is in session. The center is supported by a portion of the fees paid each quarter by all students and there is no additional charge for professional services of the physicians. All students, including transfers and graduate students, must have a preadmission physical by their own physician, and the form for same must be on file in the university medical center.

Contacts with University Medical Services are confidential. Records are maintained separately for use of health personnel only. In case of serious illness or injury parents or guardians will be notified.

The medical center does not issue excuses for class absences because of illness. Students who withdraw from the university for reasons of health must receive medical clearance through the medical center before being readmitted. Before clearance

is granted, the student must present evidence that the condition which necessitated withdrawal has improved and that there is reasonable expectation of his ability to participate in university life.

Drugs

Medicines for most illnesses are furnished to the student through the infirmary; prescriptions are written for other medicines which may be purchased at local pharmacies.

Insurance

Low-cost hospital and accident insurance is available. This insurance will pay a substantial part of charges for hospitalization, surgery, treatment for accidental injuries, diagnostic tests, and medical emergencies. It provides year-round coverage on or off the campus.

In addition, the University Medical Services will pay the first \$25 toward the hospital bill of any student admitted to Watauga County Hospital. This payment is not made for dependents of students.

Counseling and Psychological Services Center

For those who are concerned about the way they feel and their relationships with other people, there's the counseling center. All contacts with the center are confidential. Center psychologists and counselors provide both personal and group counseling for students and their spouses. Vocational and career guidance also is provided. These services are provided without charge to Appalachian students.

The testing section of the center has the responsibility for organizing and administering the individual and group tests for the university community. Available tests include individual intelligence, personality tests, and vocational interest inventories. Information concerning large group tests such as National Teacher Examinations, Miller Analogies Test, and university proficiency tests is also available.

Library Services

The four-year-old Belk Library is the center of academic life at Appalachian. Housed there in open stacks are 250,000 volumes and holdings in nonbook materials such as films, slides, tapes, recordings, magazines, newspapers, microfilms, maps, and pictures. The university's Audiovisual Services Center is located on the first floor of the library and it provides resources and materials to support the university's instructional program. Audiovisual materials can be prepared for faculty and students on request.

Administration of the library is carried out by 20 faculty members, 21 supportive staff members, and more than 100 part-time student assistants.

The library also is a U.S. Government Documents Depository and some 50,000 documents are housed in the library.

Information on the special collections and regulations concerning the loan of library materials are listed in the *Library Handbook*. It is issued to all faculty members and students.



Placement and Career Services

Appalachian operates a busy Office of Placement to help its alumni and prospective graduates find the jobs they want. The office maintains relationships with outstanding school systems, colleges, industries, and local, state, and federal governmental agencies across the country. The Director of Placement keeps up-to-date information regarding vacancies, certification and license requirements, and qualifying examinations. He arranges for interviews between students and employers. Students and alumni may participate in a nationwide computerized placement service through this office.

With the assistance of the Placement Office, 90 percent of Appalachian's June, 1972, graduates were employed in their field by September 15 of that year. Another 5 percent were recently married women who were not in the job market.

Appalachian and some agencies to which it reports require a follow-up report on each graduate. Consequently, the Office of Placement must have a resume sheet or personal data sheet on each graduate. If a student or alumnus does not wish confidential recommendations, he is not required to have them in this file; but he must supply the personal data sheet.

A great majority of the seniors, graduate students, and alumni choose to have a complete file with confidential ratings and recommendations. Most employers expect such recommendations and it is to the advantage of the job seeker to have such a file. Such information is confidential. Forms for this purpose are furnished to each registrant.

Some students, alumni, and persons submitting references wish to have a conference and then file a joint evaluation form. The Office of Placement provides a form designated as "Joint Evaluation of Registrant by Reference and Registrant." Many students and alumni throughout the nation feel that they have a right to see any evaluation in their record. The joint evaluation provides such visibility. However, many persons asked to submit references do not wish to engage in a

joint evaluation, and the students or alumni should understand that some employers may place less value on a joint evaluation than on confidential evaluations.

Because the use of the placement service is voluntary, a student or alumnus is permitted to request in writing the destruction of any or all confidential statements or recommendations.

Postal and Banking Services

A U.S. Post Office Contract Station is maintained by Appalachian in the Plemmons Student Center. Every on-campus student has a personal mailbox there, but boxes are not available for off-campus students.

A branch of the Northwestern Bank is located in the lobby of the University Bookstore.

Laundry Service

A nonprofit laundry plant is operated on the campus and is used extensively by students, faculty, and staff. It provides all the services of a commercial laundry-dry cleaning plant, including daily pick-up and delivery in each dormitory. On-campus students whose laundry service charge is in excess of the minimum quarterly fee will settle their accounts with the Cashier's Office. Clothes should bear permanent name markings to avoid confusion in the laundry. Cash and carry service is available to off-campus students.

Motor Vehicles

Everyone who operates a car or other motor vehicle on campus must register it with the university's Traffic Office. There are no exceptions.

Freshmen not residing with immediate relatives, all students on academic or disciplinary probation, and all students who have a grade-point average below 2.00 are prohibited from registering, maintaining, or operating a motor vehicle on the campus or its environs.



Those who are eligible to drive on campus apply for parking privileges on registration day as a part of academic registration. Any student who must operate a vehicle on campus after registration day, no matter how short the period, must register the vehicle at the Traffic Office before it is driven on the campus.

A student may not register a vehicle that was or is owned or used by another student, unless ownership of that vehicle has been transferred and proof to that effect can be shown. No one may register a vehicle for a freshman student. The annual automobile registration fee is \$12 for fall quarter registrants. Adjusted fees are in force for those who register automobiles during the terms.

Food Services

Appalachian owns and operates its own food service in three different campus dining facilities: the University Cafeteria, the Bavarian Inn, and the Gold Room. Mealbooks or cash are negotiable in each dining room and in the ice cream parlor in the student center, also operated by university food services.

Reading Center

The university's Reading Center provides diagnostic and remedial services in reading for Appalachian students and for others in the region who want and need assistance in becoming more proficient readers. The center also serves as a laboratory for students in the teacher preparation program.

Computer Center

Appalachian's Computer Center, which houses IBM 1130 and UNIVAC 9400 computing systems, serves the region by storing and analyzing data on important community programs. It makes possible, for example, far reaching public health programs, and it streamlines administrative chores of public school systems in the region.

As a facility for campus, the center is a supportive agency for administrative functions such as registration and information storage. It serves as a laboratory for instruction in computer science and data processing. Parts of the center remain open 24 hours per day, seven days per week, for use by the students.





Admissions, Expenses, Financial Aid





Admissions

Appalachian seeks to admit students who are capable of mature, college level work. As a state-supported institution, the university recognizes its obligation to provide educational opportunities to those who will benefit from them. Considerations of space, availability of housing, and other limitations, however, place some restriction on the number of students who can be admitted to the university. For this reason, applicants are admitted whose preparation, ability, interest, character, and general fitness indicate that they can do successful work. Applicants must submit their social security number and, if applicable, their selective service number and number and address of their local draft board. Appalachian admits students at the beginning of the fall, winter, spring, summer quarter, or either session of summer school. Early application is advisable for any student since these applications are considered first.

Out-of-state applicants must meet the same admissions criteria as required of North Carolina residents.

The complete medical history of each applicant must be submitted on the medical form supplied by the Admissions Office after approval has been given.

All correspondence concerning admissions to the Graduate School should be addressed to the Dean of the Graduate School, Appalachian State University, Boone, North Carolina, 28608.

Unclassified Students

1. Applicants who are mature and who may not meet admission requirements, but who have a satisfactory record of experience and education, may be admitted to courses which they may be able to pursue with profit.

2. Such applicants may be required to present evidence of having earned a college degree or evidence of the need for specific courses. Applicants who are regularly enrolled students at other institutions may be admitted as "visiting" students provided the appropriate official at their institution authorizes their attendance at Appalachian, approves the course work selected, indicates the individual is in good standing at that institution, and otherwise approves the transfer of credits taken at Appalachian back to that institution for degree purposes. At the end of one quarter's work, visiting students must transfer to Appalachian or withdraw from the university.
3. Unclassified students who desire to become candidates for a degree from Appalachian must satisfy appropriate admission requirements.

Auditors

1. Students enrolled at the university or students admitted with satisfactory records of experience and education may enroll for specific courses as auditors.
2. Students who audit courses must register in the Registrar's Office, pay regular fees, be regular in attendance, but will not receive grades or credit.

Foreign Student Admission

A student wishing to apply for graduate admission as a foreign student should first make arrangements through the American Consulate in his own country to take the Test of English as a Foreign Language (TOEFL Test). No student can be approved (even if he meets other requirements) until a satisfactory score is received.

Funds for financial assistance to foreign students are not available. Therefore, arrangements for all expenses should be made before a student leaves his own country. All foreign students must have health insurance before they can be admitted.

Foreign students are considered out-of-state students and must pay tuition and fees based upon out-of-state rates.

Information for Veterans

The university is approved for providing training under Public Law 358, G.I. Bill effective June, 1966; Public Law 634, the children of deceased or disabled veterans; and Public Law 894, for disabled veterans. APPROVAL FROM THE VETERANS ADMINISTRATION SHOULD BE RECEIVED BY THE STUDENT BEFORE ENTERING SCHOOL.

Students may contact the Veterans Administration Regional Office, 301 North Main Street, Winston-Salem, North Carolina, for information and necessary forms.

Children of disabled or deceased veterans may receive assistance in payment of tuition, room, meals, and other university fees. For information regarding eligibility and application forms students should write to the North Carolina Veterans Commission, Raleigh, North Carolina.

Expenses

Fees are charged by the quarter and are due and payable in advance at the beginning of each quarter in accordance with payment instructions issued prior to each quarter.

The fees payable each quarter for graduate students during the 1973-74 academic year, as anticipated at the time of publication of this catalog, are listed below. With the approval of its governing bodies, the university reserves the right to make changes in these fees when circumstances require.

Quarterly Tuition and Fees for Graduate Students

	In-state		Out-of-state	
Living off campus*	\$157.91		\$686.25	
Living on campus +	Men	Women	Men	Women
	\$450.91	\$425.91	\$979.25	\$954.25

* Includes tuition and fees applied to student welfare and activities, registration, and other incidental fees.

+ Includes charges described in (*) above and room, minimum board, and minimum laundry and dry cleaning fees. *This charge is increased by \$10.00 for occupants of dormitories with telephones in rooms.*

The application for admission must be accompanied by an application fee of \$10.00 which is not deductible or refundable.

A room reservation deposit of \$100.00 for students entering Appalachian for the first time or \$50.00 for a student already enrolled must accompany the application for a room reservation. The room reservation deposit is deductible from the room rent charge at the opening of the first quarter of residence. Room reservation deposits from new students for the fall quarter are refundable upon notification on or prior to May 10 and from returning students on or prior to June 15. Requests for refunds should be made to the Director of Housing Operations.

Part-Time Students

Students who register for 1 to 7 hours pay the following charges per quarter hour:

In-state	\$10.00
Out-of-state	\$15.00

Students who register for more than 7 hours pay full charges.

Out-of-State Students

The following are the criteria used in determining residence status for payment of tuition.

1. *General:* The tuition charge for legal residents of North Carolina is less than for nonresidents. To qualify for in-state tuition, a legal resident must have maintained his domicile in North Carolina for at least the 12 months next preceding the date of first enrollment or re-enrollment in an institution of higher education in this state. Student status in an institution of higher education in this state shall not constitute eligibility for residence to qualify said student for in-state tuition.

2. *Minors:* A minor is any person who has not reached the age of 18 years. The legal residence of a person under 18 years of age at the time of his first enrollment in an institution of higher education in this state is that of his parents, surviving parent, or legal guardian. In cases where parents are divorced or legally separated, the legal residence of the father will control unless custody of the minor has been awarded by court to the mother or to a legal guardian other than a parent. No claim of residence in North Carolina based upon residence of a guardian in North Carolina will be considered if either parent is living unless the action of the court appointing the guardian antedates the student's first enrollment in a North Carolina institution of higher education by at least 12 months.
3. *Adults:* An adult is any person who has reached the age of 18 years. Persons, 18 or more years of age at the time of first enrollment in an institution of higher education, are responsible for establishing their own domicile. Persons reaching the age of 18, whose parents are and have been domiciled in North Carolina for at least the preceding 12 months, retain North Carolina residence for tuition payment purposes until domicile in North Carolina is abandoned. If North Carolina residence is abandoned by an adult, maintenance of North Carolina domicile for 12 months as a nonstudent is required to regain in-state status for tuition payment purposes.
4. *Married Students:* The legal residence of a wife follows that of her husband, except that a woman currently enrolled as an in-state student in an institution of higher education may continue as a resident even though she marries a nonresident. If the husband is a nonresident and separation or divorce occurs, the woman may qualify for in-state tuition after establishing her domicile in North Carolina for at least 12 months as a nonstudent.
5. *Military Personnel:* No person shall lose his in-state resident status by serving in the Armed Forces outside of the State of North Carolina. A member of the Armed Forces

may obtain in-state residence status for himself, his spouse, or his children after maintaining his domicile in North Carolina for at least the 12 months next preceding his or their enrollment or re-enrollment in an institution of higher education in this state.

6. *Aliens:* Aliens lawfully admitted to the United States for permanent residence may establish North Carolina residence in the same manner as any other nonresident.
7. *Property and Taxes:* Ownership of property in or payment of taxes to the State of North Carolina apart from legal residence will not qualify one for the in-state tuition rate.
8. *Change of Status:* The residence status of any student is determined as of the time of his first enrollment in an institution of higher education in North Carolina except:
 - (a) in the case of a nonresident student at the time of first enrollment who has subsequently maintained domicile as a nonstudent for at least 12 consecutive months and
 - (b) in the case of a resident who abandons his legal residence in North Carolina.

In either case, the appropriate tuition rate will become effective at the beginning of the first subsequent term enrolled.

9. *Responsibility of Students:* Any student or prospective student in doubt concerning his residence status must bear the responsibility for securing a ruling by stating his case in writing to the Admissions Officer. The student who, due to subsequent events, becomes eligible for a change in classification, whether from out-of-state to in-state or the reverse, has the responsibility of immediately informing the Registrar of this circumstance in writing. Failure to give complete and correct information regarding residence constitutes grounds for disciplinary action.

Student Welfare and Activities

Student fees support such services and activities as health care, student government, concerts and lectures, class dues, popular programs, forensics, dramatics, intramurals, student

publications, attendance at all athletic events on campus, and transcript fees.

Other Fees

Change of room.....	\$ 2.00
Late payment of tuition and fees.....	10.00
Late orientation test	2.00
Music per quarter	
Each thirty-minute individual lesson a week ...	15.00
One class lesson a week	9.00
Practice rooms for voice, piano, or organ	
First quarter hour.....	5.00
Each additional quarter hour	2.50
Practice rooms for strings, wind, or percussion	
First quarter hour.....	2.50
Each additional quarter hour	1.25
Physical education activity per quarter	
Bowling	8.00
Skiing.....	50.00
Student teaching and internships per quarter hour credit	2.00
National Teacher Examinations and Miller Analogies Test	
N.T.E.—Common and one teaching area.....	15.00
N.T.E.—Common only	10.00
N.T.E.—One teaching area.....	9.00
Late registration fee for N.T.E.	3.00
M.A.T. (individual administration).....	7.50
M.A.T. (group administration).....	5.00
Graduate Record Examinations	
Aptitude Test only.....	8.00
Advanced Test only.....	9.00
Aptitude Test and one Advanced Test.....	15.00



Special Note

Before taking final examinations at the close of each quarter, a student is expected to settle all accounts. A student may not register for a new quarter until all charges have been paid or arranged for and until all textbooks are returned to the University Bookstore. A student cannot receive a degree, certificate, or transcript of credits until all accounts, except current, and loans have been paid.

Refund of Tuition and Fees

If a student formally withdraws from the university, refund will be made in accordance with the following schedule:

Before close of the registration period:

60 percent of tuition, fees, and room rent.

Within two weeks after close of registration period:

40 percent of tuition, fees, and room rent.

Within four weeks after close of registration period:

20 percent of tuition, fees, and room rent.

Withdrawal at any time will entitle the student to refund of the proportionate part of the amount paid for meals, if applicable.

Refund calculation will be based upon the date of official withdrawal from the university.

A student who has prepaid tuition and fees but who does not complete registration for classes will be due a full refund if he has been determined to be academically ineligible to complete registration. If he has not completed registration for other reasons, he will be due a full refund less any advance deposits he may have made toward tuition, fees, and housing.

Students who are suspended for disciplinary reasons or who do not formally withdraw are not eligible for a refund.

Student Financial Aid

More than half of Appalachian's students receive financial aid. This includes federal work-study programs, various loan programs, and several types of scholarships. Resources available to students through the Office of Student Financial Aid are limited, but financial assistance is within reach of almost every student who can show average academic achievement and definite financial need.

If you realize that you will be unable to meet university expenses without assistance, determine the approximate amount needed per quarter and take initiative yourself in

seeking information from your high school guidance counselor or from the Director of Student Financial Aid. You will be directed to file application for at least one of the principal types of financial aid indicated below.

Aid applications for the following academic year must be submitted by April 15.

Information to Veterans

The university is approved for providing training under provisions of Chapter 34, Title 38, U.S. Code, G. I. Bill effective June, 1966; Chapter 35, Title 38, U.S. Code, the children of deceased or disabled veterans; and Public Law 894, for disabled veterans.

Students enrolling under provisions of Chapter 34 and 35 will pay fees at the time of registration but receive a monthly education and training allowance from the Veterans Administration. Since the first check is usually delayed, a veteran should make his arrangements early.

Students may contact the Veterans Administration Regional Office, 301 North Main Street, Winston-Salem, North Carolina for information and necessary forms. *Approval from the Veterans Administration regarding eligibility should be received by the student before entering school. The approval form (certificate of eligibility) should be submitted to the Financial Aid Office for completion after the veteran enrolls.*

Children of disabled or deceased veterans may receive assistance in payment of tuition, room, meals, and other university fees. For information regarding eligibility and application forms, students should write to the North Carolina Veterans Commission, Raleigh, North Carolina.

Student Employment Programs

Student employment programs are maintained to help you pay university expenses while attending classes full time. Students participating in the programs are employed in administrative offices, in colleges and academic departments, and in service facilities such as the bookstore, the library, and the food services.

The student employment programs consist of the University Self-Help Program and the University Work-Study Program (Title I, EOA). A student returning to school for the summer session only is not eligible to work under this program.

In addition, a Student Employment Service has been established as a branch of Appalachian's Office of Student Development. Located in Workman Hall, it lists off-campus work opportunities and some on-campus placements.

Generally, you may work up to 15 hours per week in university-operated work programs. Your schedule will be arranged by you and your work supervisor with the understanding that class schedules have first priority.

Student Loan Programs

Detailed information may be obtained from the Director of Student Financial Aid. Available loan programs are as follows:

The College Foundation, Inc.

The National Defense Student Loan Program

Scholarship Loan Fund for Prospective Teachers of the Mentally Retarded

Guaranteed Loan Program (for out-of-state students)

University Student Loan Fund

Appalachian has been given funds over the years to use as educational loans for students. When you borrow money from any of the funds listed below, you sign a promissory note and make arrangements for repayment satisfactory to the Office of Financial Services. The loan funds include:

The Nora E. Edmondson Fund	The Mark Davis Fund
The Frances L. Goodrich Fund	The W. J. Waters Graduate Fund
The B. H. Harmon Fund	The Tau Beta Emergency Fund

The Library Science Fund
(by Eunice Query and Ma-
bel Brister)

The Dr. W. Amos Abrams
Fund

Scholarships

The J. D. Rankin Memorial Scholarship

Endowment Scholarships

Living Endowment Fund for Scholarships

Vocational Rehabilitation Scholarships
(apply through N.C. Department of Vocational Rehabilita-
tion)

The G. P. Eggers Scholarship
(English majors only)

The Dr. J. B. Hagaman, Jr. Memorial Scholarship
(students in science only)

The Broyhill Industrial Arts Scholarship Loan Program
(industrial arts majors only)

The Clara Sullivan Crawford Memorial Scholarship Fund

The Graduate Alumni Scholarship
(apply through ASU Graduate School)

The Capt. E. F. Lovill Fund
(apply through ASU Graduate School)

Fellowships and Assistantships

Approximately one hundred teaching fellowships and assistantships are available for the regular session. Five research fellowships carrying stipends of \$1200 each are available to qualified applicants. Half-time fellows and assistants will devote twenty-four hours a week to laboratory instruction or other service to the University. Third-time and quarter-time assistants give proportionately less time to their assistantships. Assistants receive annual stipends of \$1800 to \$3600 and are permitted to carry a quarterly academic load of nine, twelve, and fifteen

quarter hours depending upon the classification of the assistantships. Appalachian offers only a limited number of graduate assistantships for the summer quarter, the stipends ranging from \$200 to \$250 for each term.

Teaching fellowships are available in the laboratory schools and in the University. Departments in which fellows and assistants may work are biology, chemistry, economics and business, education, English, French, geography, history, industrial arts, library science, mathematics, music, physical education, political science, psychology, social science, sociology, Spanish, and speech. In addition, twelve dormitory counselorships are available.

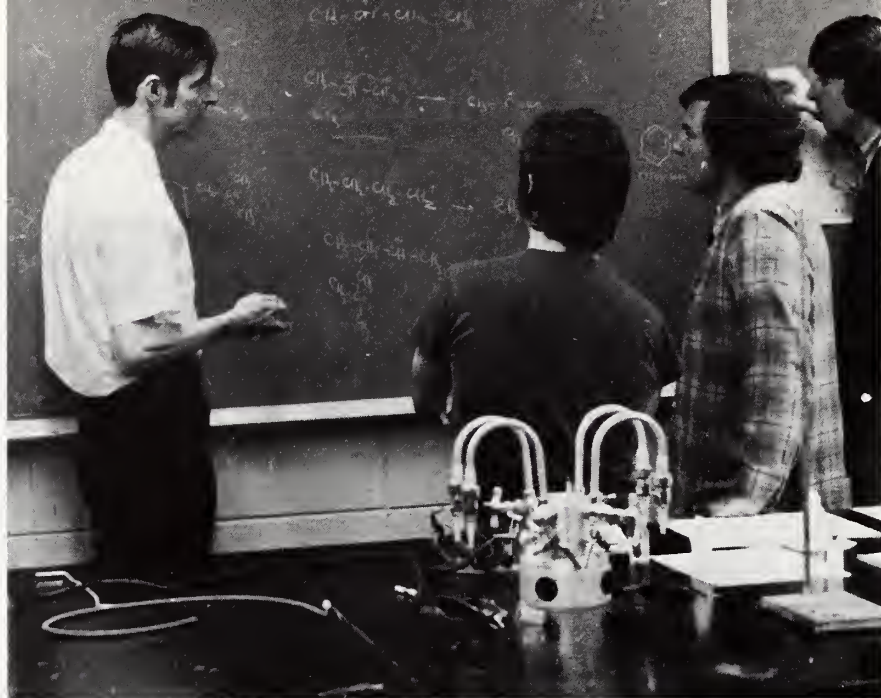
Up to forty work-study assistantships paying up to \$900 for the academic year and \$300 for the summer are made available to qualified applicants through the Economic Opportunity Act. Students interested in a work-study assistantship are advised to write to the Director of Student Financial Aid, Appalachian State University, before April 15 for both the summer school and the succeeding academic year.

For the preparation of junior college teachers, Appalachian offers a two-year program which combines graduate study with supervised college teaching experience in any one of the following fields: audiovisual education, biology, chemistry, economics and business, English, French, geography, history, industrial arts, library science, mathematics, music, physical education, political science, psychology, social science, sociology, Spanish, and student personnel services. Twelve appointments in this program are maintained each year. An applicant is required to have at least an average of *B* on his undergraduate work. Teaching experience is desirable. The junior college teaching fellow receives a total stipend of \$4800 to \$5400 paid on the basis of \$1200 to \$1800 during the first year and \$3600 to \$4000 during the second.

Anyone wishing to apply for an assistantship or a teaching fellowship should write the Dean of the Graduate School for application forms and return them properly filled out, and he should submit a complete transcript of his college work not later than July 1. Applications for assistantships, teaching fellowships, and work-study assistantships are considered only after applicants have been approved for admission to the Graduate School.

The Graduate School





The Graduate School

Cratis Williams, Dean

The Graduate School, organized to provide facilities for advanced study leading to master's degrees, Certificates of Advanced Study, and specialist's degrees, offers programs of graduate work during the summer session and the three quarters of the regular session. Late afternoon, evening, and Saturday morning courses are scheduled for commuters and part-time students. Extension courses are offered in the region which Appalachian serves. A maximum of 9 quarter hours may be earned in a five-week summer term and 15 quarter hours in a quarter in the regular session. Up to 12 hours of degree credit may be offered through extension and/or by transfer from another accredited graduate school.

The primary purpose of graduate study is to offer capable students opportunities and facilities for advanced study and research in their fields of specialization. The graduate programs are designed to develop or extend significantly specialization in academic, professional, or interdisciplinary areas. One of the functions of the Graduate School is to prepare master teachers, supervisors, and administrators. Accordingly, work leading to the Master of Arts degree is designed to prepare teachers for the following types of positions: superintendent, principal, general supervisor, supervisor of student teaching, school librarian, media center director, secondary school teacher, elementary school teacher, school counselor, school musician, reading specialist, audiovisual specialist, junior college teacher, junior college administrator, special education teacher, speech pathologist, student personnel director. A second function is to give an opportunity for academic training beyond the bachelor's degree to persons not interested in professional education. For these, programs leading to the Master of Arts degree in English, geography, history, mathematics, political science, psychology, or

clinical psychology and the Master of Science degree in biology or chemistry have been approved.

Specialist in Education programs are offered in Educational Leadership, Elementary Education, and Higher Education. A minor consisting of 18 to 24 quarter hours of advanced graduate work in an academic area or in counseling, reading education, or educational media may be included in Ed.S. programs in Elementary Education and Higher Education. The Specialist in Science degree is available in biology.

Courses which have been approved for graduate credit by the curriculum committee of the college, the Academic Policies and Procedures Committee, and the Graduate Council constitute the graduate offerings. Majors are provided in audiovisual education, biology, chemistry, counseling, economics and business, educational media, English, elementary education, French, geography, higher education, history, industrial arts, library science, mathematics, music, physical education, political science, psychology, clinical psychology, school administration, school supervision, science, special education, speech pathology, reading specialization, supervision of student teaching, social science, Spanish, and student personnel services. Minors are available in art, junior college education, philosophy and religion, physics, secondary education, sociology, and speech and drama. For further information on each of these majors see the appropriate departmental description in this catalog.

The Graduate School at Appalachian State University was organized in 1948. By the end of academic year 1971-1972 a total of 5,192 master's degrees had been awarded. There were 3,030 persons enrolled in graduate school in the summer of 1972 and 1,180 in the fall quarter of 1972-1973. The graduate programs at Appalachian are nationally known. Among 492 awarded graduate degrees in 1972 were 273 graduates of other institutions and 107 out-of-state students.

On February 26, 1949, graduate study at Appalachian was approved by the American Association of Colleges for Teacher Education. Programs leading to certificates based on a graduate degree are approved by the National Council for Accreditation of Teacher Education. The Graduate School has been a member of the Council of Graduate Schools in the United States since 1961.

The graduate faculty, consisting of 265 members in the fall of 1972, includes 222 who hold doctoral degrees from outstanding universities. The remainder are specialists in their fields or holders of terminal degrees in their disciplines. The library holdings, housed in the new Belk Library, include approximately 250,000 volumes and are being supplemented currently at the rate of 25,000 volumes a year.

Summary of Procedures for Graduate Degree Students

Successive Steps	Time
1. Application for admission to Graduate School.	1. At least one month prior to student's first registration.
2. Miller Analogies Test.	2. An acceptable score for the NTE or the GRE by the middle of the first quarter.
3. Consultation with departmental advisor.	3. During registration and about two weeks later.
4. File with the departmental advisor three copies of the application for candidacy and the program of study leading to the degree or certificate of advanced study.	4. Prior to the close of the first quarter, or the term in which the first 12 quarter hours of resident graduate work will be completed.
5. Clearance and application for degree. Obtain necessary forms and instructions from the Graduate Office.	5. Have program of study cleared in the Graduate Office prior to or during registration for the last quarter of work. <i>File application for degree by end of the first week of final quarter.</i>
6. Comprehensive examination.	6. During last quarter and at least ten calendar days before graduation.
7. Completion and defense of thesis.	7. Completed at least one month prior to date set for defense of thesis. Thesis must be defended prior to seven days before graduation.
8. Filing of unbound copies of thesis and abstracts in the university library.	8. Immediately after approval of thesis committee and acceptance by the Dean of Graduate School.
9. Conferring of degree.	9. June or August commencement.

Admission: Master's Degree Programs

Requirements

1. A baccalaureate degree from a college or university of recognized standing.
2. An undergraduate background appropriate for graduate study in the proposed field. If the student intends to become a candidate for the Master of Arts degree with a major or minor in education, he must present a minimum of 27 quarter hours of undergraduate credit in education and related courses. For prerequisites in his academic field he should consult the chairman of the graduate advisory committee in that field.
3. A satisfactory undergraduate academic record. For unconditional admission, one must have either an overall average of at

least *C+* or at least an average of *B* for his last two years of undergraduate work and at least an average of *B* in his undergraduate major. However, a student with lower averages whose record reflects progressive improvement as he moved through undergraduate school and whose average for the senior year was at least *B* might be approved if his application is supported by excellent letters of reference and scores from *both* of the required tests that place him at or above the 50th percentile on a nationwide basis. A student with a lower academic average may be admitted for one quarter on probation if his references recommend him and his score from one of the required tests is satisfactory. Upon the satisfactory completion of one quarter of work, a student admitted on probation may make application for admission to candidacy. The admission status of an applicant who is a graduate of an institution which does not award grades is determined on the basis of reference evaluations and scores for the Miller Analogies Test and either the National Teacher Examinations Weighted Common or the Graduate Record Examinations Aptitude Test and the appropriate Option. An interview may also be required.

4. A report of scores from the Miller Analogies Test, which is administered by appointment at the testing centers on the campuses of most universities and many senior colleges.
5. An application for admission made on a special form, obtainable on request, and submitted with two complete transcripts of all previous college work, unless done at Appalachian, at least one month before the candidate plans to begin graduate study.
6. Three reference ratings, one of which must be from a college administrator or the head of the department in the candidate's undergraduate major field of study.
7. Freedom from serious physical, personality, or speech defects.
8. Approval of the chairman of the department or the coordinator of the curriculum in which he intends to major.
9. A record of successful teaching experience or satisfactory completion of student teaching is required for one applying for admission to a program leading to a certificate to work in public schools. Such an applicant must hold, or be eligible to hold, a North Carolina A teaching certificate in his chosen field or the comparable certificate in another state.

Admission Status

Regular. Regular admission to the Graduate School is granted to students who meet the established requirements for entrance.

Provisional. A student who does not have all the course prerequisites for admission, or who has deficiencies, but is otherwise admissible may enter on a provisional basis.

Probationary. A student who does not meet established requirements for admission but who supplies sufficient evidence to show that he is capable of doing satisfactory graduate work may be admitted on a probationary basis for one quarter. If his work is satisfactory, he may then be permitted to apply for admission to candidacy for the master's degree.

High Risk. A student with a good-to-excellent undergraduate record and who is highly recommended by the references but whose scores on required tests are below the normal cutoffs for admission to candidacy may be admitted as a "high risk" graduate student. If his GPA is at least 3.20 for the first quarter of graduate work, he may apply for candidacy.

Unclassified. A student who does not plan to work for the master's degree may be permitted to register for graduate courses for self-improvement or to be used for renewing his certificate or changing his certification pattern. Such work, however, may not later be applied toward the degree. Unless the student already holds the master's degree, he is normally encouraged to apply for admission in order to assure a dual use of his graduate credits.

Transient. A student enrolled in another recognized graduate school may be permitted to register for a limited number of graduate credits at Appalachian provided the dean of the graduate school in which he is enrolled submits a statement that he is in good standing.

Advisors

Each student admitted to a program of graduate study at Appalachian State University is assigned an academic advisor or advisory committee from the department or curriculum program in which the student plans to complete the major portion of his work. The student is expected to meet with his advisor during the first term on campus for the purpose of developing a graduate degree program. Changes in this program can be made only with the approval of the advisor and the Dean of the Graduate School. Course work taken without the approval of the advisor will not automatically be applicable towards the degree. A list of advisors for each graduate major offered follows:

Audiovisual Education	John A. Pritchett
Biology	F. Ray Derrick
Chemistry	George B. Miles

Early Childhood Education (K-3).....	Grace G. Lilly
Economics and Business	Orus Sutton
Educational Media	Doris Cox
Elementary Education (4-9)	Grace G. Lilly
English.....	John E. Trimpey
Foreign Languages.....	J. Roy Prince
Geography.....	Terry E. Epperson, Jr.
Guidance and Counseling.....	J. Edward Harrill
History.....	Roy Carroll
Industrial Arts.....	Frank R. Steckel
Junior College Education	Leland Cooper
	Sandra Gruetter
	Marshall McLeod
Mathematics	Ray Graham
Music	Wayne Sheley
Physical Education	Edward T. Turner
Political Science	Roland F. Moy
Psychology, Clinical	Richard H. Levin
Psychology, General-Theoretical	Walter T. Snipes
Reading Specialist	Uberto Price
School Administration.....	Nathaniel H. Shope
	N. W. Shelton
	Alvin R. Hooks
	Guy T. Swain
	Spencer D. Durante
Science Education	F. Ray Derrick
Secondary Education	N. A. Miller
Social Science (General)	P. Albert Hughes
Social Science (Sociology Concentration).....	A. M. Denton
	Louie Brown
Special Education.....	Benjamin L. Brooks
Speech Pathology.....	Charles E. Porterfield
Student Personnel Services	
(Junior College)	J. Edward Harrill
Supervision	Nathaniel H. Shope

Admission to Candidacy

Admission to graduate study does not carry with it admission to candidacy for the master's degree. Admission to candidacy for the degree is acted upon after one quarter of graduate study in the university.

1. Admission to candidacy is contingent upon the recommendation of the applicant's advisor and the approval of the Graduate Council.

2. Before being accepted as a candidate for the degree, an applicant will be expected to have demonstrated ability to do satisfactory and creditable work at the graduate level. A student must have at least a *B* average at the time his application for candidacy is presented.
3. Before filing application for admission to candidacy, the applicant shall have taken the Miller Analogies Test and the Common and the Area of the National Teacher Examinations. An applicant for admission to the junior college program may offer scores from the Graduate Record Examination Aptitude and the Advanced Test in his Area in lieu of the National Teacher Examinations. An applicant for admission to the Master of Arts programs in English, geography, history, mathematics, political science, or psychology or the Master of Science program in biology or chemistry must offer scores from the GRE Aptitude and the appropriate Advanced Test and the Miller Analogies Test.
4. Each student shall file with his advisor a program of study and an application for admission to candidacy before the end of the quarter in which he will complete 12 quarter hours of resident graduate credit at Appalachian. Forms for this purpose may be obtained either from the advisor or from the Office of the Dean of the Graduate School. At the time the application is presented to the Graduate Council by the advisor, the student shall have completed the research course required in his major field and at least one other course in his major field. In all cases the student must complete at least 15 quarter hours of credit after he is admitted to candidacy.
5. The application for admission to candidacy shall be accompanied by a proposed program of study approved by the applicant's advisory committee and the Dean of the Graduate School. Normally, the program of study will include a major of not less than 36 quarter hours in audiovisual education, biology, chemistry, counseling, economics and business, education, educational media, English, French, geography, history, industrial arts, library science, mathematics, music, physical education, political science, psychology, reading education, science, social sciences, Spanish, or speech pathology and a minor of not less than 9 quarter hours in education if the proposed major is in a field other than education.
6. Except for those preparing to teach in junior college or moving toward the Master of Arts in English, geography, history, mathematics, political science, or psychology, or the Master of

Science in biology or chemistry, students are required to present a minimum of 27 quarter hours of undergraduate credit in education and related courses. The applicant's academic field shall be based upon a prerequisite of an undergraduate major in that field. Persons preparing in elementary education for the N. C. Intermediate Certificate (4-9) and majoring in an academic area must present a minimum of 21 hours of undergraduate work in the academic field. Those preparing for the N. C. Graduate Early Childhood Education Certificate (K-3) may spread the academic graduate work over as many as four fields with at least 9 hours of academic work in a single field.

Requirements for Graduation

The degree of Master of Arts, Master of Science, Specialist in Education, or Specialist in Science may be conferred upon a student who has completed creditably the program of work submitted to the Graduate Council at the time the application for admission to candidacy was approved. Except in M.S. programs in biology and chemistry and nonteaching M.A. programs in English, geography, history, mathematics, political science, and psychology, the candidate may, with the approval of the advisor and the Graduate Council, elect not to write a thesis. Hence, either of two programs for a master's degree may be followed.

1. Thirty-nine acceptable quarter hours of graduate course work, exclusive of the thesis, 33 of which must be completed in residence at Appalachian.
2. A minimum residence of one academic year (36 weeks) or its equivalent in the summer.
3. A thesis in the major field of interest, for which the candidate shall register for credit not exceeding 6 quarter hours.
4. All graduate credit offered for the degree must have been earned with a limit of six calendar years, or if earned within a limit of ten years, validated by examination. Graduate credit transferred from another institution may not be validated by examination. All work to be credited toward the degree, except that being taken currently, must be completed and grades recorded at least four weeks before the degree is awarded.
5. Not more than 15 quarter hours offered toward the degree may be credit earned in courses with catalog numbers below 500.
6. Grades on course work may not average lower than *B*. No graduate course with a grade below *C* will be credited toward the degree.

7. An acceptable performance on a comprehensive examination, either oral or written or both, is required of every candidate for the degree. The comprehensive must be scheduled during the last one-third of the residence period and at least ten calendar days prior to the date on which the candidate receives the degree.

At least four weeks (two weeks in the summer session) before he is scheduled to defend his thesis before his examining committee, the candidate must submit a preliminary copy to each member of his committee. Within ten days (five days in the summer session), other members of the committee shall return the thesis to the chairman of the thesis committee with written criticism and statements of conditional or tentative approval.

Prior to seven calendar days (five in the summer session) before he expects to receive his degree, the candidate will defend his thesis in an oral examination by his committee.

Immediately after the approval by the thesis examining committee, four typewritten copies of the thesis, the original and the first three carbon or zergographic copies, must be filed in the university library, together with the costs of having them bound.

Four copies of the approval sheet must be prepared by the student. One copy is bound with each copy of the thesis.

Four copies of an abstract of the thesis must be filed with the thesis after the abstract has been approved by the chairman of the thesis committee. The abstract, not to exceed two typewritten pages, shall give the problem, the procedure, and the conclusions reached in the thesis.

Thesis:

The subject of the thesis must be within the major field. The thesis should show:

1. Ability of the candidate to work independently on an approved problem.
2. A reasonably wide familiarity with the literature of the field of specialization.
3. A practical working knowledge of research methods.
4. Conclusions supported by data.

The student must have presented a prospectus to his advisor and received approval of his proposed topic before he is permitted to register for the thesis. The candidate's thesis advisor and two graduate faculty members of the department will constitute his thesis committee. The department chairman may appoint any member of

the graduate faculty of his staff to act as chairman of the thesis committee and to supervise the writing of the thesis.

The latest edition of Campbell's *FORM BOOK FOR THESIS WRITING* is the approved guide for form of theses in educational fields. With the approval of the Dean of the Graduate School and the thesis committee, the form may be varied to meet the requirements of the discipline in which the thesis is being written or of publishers if the manuscript is to be printed. One planning to write a thesis should request from the chairman of his department a copy of "Procedures for Writing a Thesis."

Without Thesis:

1. Fifty-four acceptable quarter hours of graduate course work, 42 of which must be completed in residence at Appalachian. A candidate may, with the permission of his advisor and the approval of the Graduate Council, offer up to 12 quarter hours of graduate credit from another graduate school or 12 quarter hours of graduate extension credit from Appalachian or a combination of up to 12 quarter hours, but in no case may the residence at Appalachian be less than one academic year (36 weeks).
2. All graduate credit offered toward the degree must have been earned within a limit of six calendar years, or, if earned within a limit of ten years, validated by examination. Graduate credit transferred from another institution may not be validated by examination. All work to be credited toward the degree, except that being taken currently, must be completed and grades recorded at least four weeks before the degree is awarded.
3. For candidates majoring in education, not more than 18 quarter hours offered toward the degree may be credit earned in courses with catalog numbers below 500, except that majors in childhood education (4-9) who concentrate in mathematics may include up to 24 hours with numbers below 500. For candidates completing an academic major of 36 hours, up to 24 hours of upper division undergraduate work may be approved, provided that not more than 18 quarter hours of it is offered in the major.
4. Grades on course work may not average lower than *B*. No graduate course with a grade below *C* will be credited toward the master's degree.
5. An acceptable performance on a comprehensive examination, either oral or written or both, is required of every candidate for the degree. The comprehensive must be scheduled during the last one-third of the residence period and at least ten calendar days prior to the date on which the candidate receives the degree.

Master of Arts Degree for Teachers and Other School Personnel

The following programs, which lead to the Master of Arts degree in education curricula, are designed for school personnel. Many of the programs do not provide an opportunity for writing a thesis.

In those programs which provide for a thesis, a student may elect not to write the thesis. If he does not write a thesis, he will with the assistance of his advisor select five courses (15 quarter hours) in lieu of the thesis, which may be in education, an academic field, or both, depending on the student's needs.

An academic major is required of the candidate preparing to teach in secondary schools. Eighteen hours or more of the work of candidates preparing to teach in elementary school will be in academic areas.

Audiovisual Specialist

CR 500.	Research in Education	3
AH 547.	Social Foundations of Education	3
	or AH 535. Philosophy of Education	
EM 466.	Instructional Materials	3
EM 475.	Audiovisual Instruction	3
AH 502.	Organization and Administration of the Secondary School	3
	or AH 504. Organization and Administration of the Elementary School	
AH 505.	Supervision of Instruction	3
AH 506.	Curriculum Construction	3
EM 528.	Production and Care of Audiovisual Materials	3
EM 532.	Use and Care of Machines and Equipment	3
EM 537.	Organization and Administration of an Audiovisual Program	3
AH 549.	School Building Planning	3
EM 554.	Television in Instruction	3
Approved courses related to audiovisual education or an academic minor		18

School Administrator

CR 500.	Research in Education	3
AH 535.	Philosophy of Education	3

AH 547.	Social Foundation of Education.....	3
AH 501.	Public School Administration.....	3
AH 502.	Organization and Administration of the Secondary School	3
AH 504.	Organization and Administration of the Elementary School.....	3
AH 505.	Supervision of Instruction	3
AH 506.	Curriculum Construction	3
AH 575.	Internship in School Administration.....	6
	or AH 525. Problems in Public School Administration	

Cognate discipline (social sciences).....	9
Electives	15

Cognate courses to be selected in conference with the student's advisor for the purpose of gaining competence in academic areas related to educational administration.

Elective courses to be selected in conference with the student's advisor for the purpose of gaining competence in academic or professional areas related to educational administration.

General Supervisor

Prerequisite: North Carolina A Certificate or its equivalent from another state; a minimum of three years of successful teaching experience.

For departmental requirements in the secondary academic major, see the appropriate department.

One preparing for General Elementary Supervision must complete all courses required in the program leading to a Graduate Intermediate or Early Childhood Education Certificate.

CR 500.	Research in Education (Elementary Major)	3
AH 502.	Organization and Administration of Secondary Schools.....	3
	or AH 504. Organization and Administration of the Elementary School	
AH 505.	Supervision of Instruction	3
AH 506.	Curriculum Construction	3
AH 517.	School Supervision	3
Psychology 503.	Child Psychology	3
	or Psychology 502. Psychology of Adolescence or Psychology 455. Advanced Educational Psychology	
EM 467.	Correlating Curriculum and the Media Center.....	3
Academic major including academic research (Secondary Major)		33

Academic concentration (Elementary Major)	21-24
Electives	0-9

Supervisor of Student Teaching

A supervisor of student teaching must qualify for graduate certification as either an elementary or secondary teacher. The program must include AH 505, SE 515, and SE 516 or SE 576.

CR 500. Research in Education (Elementary Major)	3
AH 505. Supervision of Instruction	3
AH 506. Curriculum Construction	3
CR 456. Measurement and Assessment	3
SE 515. Organizing and Planning Student Teaching	3
SE 516. Supervision of Student Teaching	3
or SE 576. Internship for Supervising Teachers	
Psychology 455. Advanced Educational Psychology	3
Academic major including academic research (Secondary Major)	36
Academic concentration (Elementary Major)	21-24
Electives	0-12

School Librarian

Prerequisite: 27 hours in Library Science including EM 301, 302, 305, 306, 307, 470, and 473 and an undergraduate grade-point average of 2.75.

EM 466. Instructional Materials	3
or EM 475. Audiovisual Instruction	
AH 535. Philosophy of Education	3
AH 506. Curriculum Construction	3
Psychology 503. Child Psychology	3
or Psychology 502. Psychology of Adolescence	
EM 451. Literature of the Humanities	3
or EM 452. Literature of the Social Sciences and the Fine Arts	
or EM 453. Literature of Science and Technology	
EM 454. Literature for Young Adults	3
or EM 456. Critical History of Children's Literature	
EM 500. Research Methods in Librarianship	3
EM 503. Reading Interests and Guidance	3
EM 512. Use of Materials with Students and Teachers	3
EM 513. Problems and Trends in School Libraries	3
Electives—with thesis (6)	9
without thesis	18
Electives	0-15

Junior College Librarian

Prerequisites: EM 301, 302, 305, or equivalent, and an undergraduate grade-point average of 2.75.

AH 542. Instruction Program of the Two-Year College	3
AH 544. Seminar on the Two-Year College	3
EM 451. Literature of the Humanities	3
EM 452. Literature of the Social Sciences and the Fine Arts	3
EM 453. Literature of Science and Technology	3
EM 473. Cataloging and Classification	3
EM 500. Research Methods in Librarianship	3
EM 504. Advanced Reference and Bibliography	3
EM 505. Advanced Cataloging and Classification	3
EM 510. Organization and Administration of the Two-Year College Resource Center	3
Electives—with thesis (6)	9
without thesis	18
Electives	0-6

Elementary School Teachers

CR 500. Research in Education	3
CE 546. Elementary School Curriculum	3
or AH 506. Curriculum Construction	
AH 547. Social Foundations of Education	3
or AH 535. Philosophy of Education	
CR 456. Measurement and Assessment	3
CR 511. Investigations in Reading	3
CE 513. Teaching the Language Arts	3
Psychology 455. Advanced Educational Psychology	3
or Psychology 503. Child Psychology	
EM 467. Correlating Curriculum and the Media Center	3
Mathematics 459. Foundations of Arithmetic	3
Electives in academic fields (K-3), or academic concentration (4-9)	18
Electives	3-9

Secondary School Teacher

Prerequisites: An undergraduate major in the teaching field; a North Carolina A Certificate or its equivalent in another state.

For required courses in the academic field, see the appropriate department.

CR 456. Measurement and Assessment	3
AH 506. Curriculum Construction	3

AH 547. Social Foundations of Education.....	3
or AH 535. Philosophy of Education	
Psychology 455. Advanced Educational Psychology.....	3
or Psychology 502. Psychology of Adolescence	
Academic major including academic research—	
With thesis (6)	33
Without thesis	36
Electives	0-6

Junior College Teacher

Prerequisites: An undergraduate major in the teaching field.

For required courses in the academic field, see the appropriate department.

AH 542. Instruction Program of the Two-Year College	3
AH 544. Seminar on the Two-Year College	3
or AH 545. Practicum in College Teaching	
or AH 574. Teaching Internship in the Two-Year College	
(Academic) 500. Bibliography and Research	
(if applicable)	3

Higher Education

CR 500. Research in Education	3
AH 501. Public School Administration.....	3
AH 552. Supervision of Instruction in the Two-Year College.....	3
AH 518. Public School Finance.....	3
AH 553. Planning the Community College.....	3
AH 560. School Law.....	3
Business Administration 516. Personnel Administration.....	3
AH 542. Instruction Program of the Two-Year College	3
AH 543. Organization and Administration of the Two-Year College	3
Psychology 455. Advanced Educational Psychology	3
CR 479. Group Methods and Processes	3
CR 541. Student Personnel Services	3
AH 574. Internship in the Two-Year College.....	3-9
Cognate areas plus electives	9-15
Total	54

Music Teacher and Music Supervisor

Prerequisites: An undergraduate major in music; a North Carolina A Certificate or its equivalent; music proficiency admission requirements.

All entering graduate music majors will demonstrate by examination their skills and abilities in music theory, music history and literature, performance music, and music education where it applies. Any deficiency noted may require courses or individual study in the area of the deficiency prior to admission to candidacy for the master's degree.

AH 547. Social Foundations of Education	3
or AH 535. Philosophy of Education	
CR 456. Measurement and Assessment	3
AH 506. Curriculum Construction	3
Psychology 455. Advanced Educational Psychology	3
or Psychology 503. Child Psychology	
or Psychology 502. Psychology of Adolescence	
Music 500. Bibliography and Research	3
529. Organization and Administration of School Music.	3
531. Seminar in Music.	3
Music History and Literature.	0-12
Music Theory	0-6
Applied Music	0-6
Advanced Conducting.	0-3
Music 552. Graduate Ensemble	0
Music electives—	
With thesis (6)	Courses to complete 33
Without thesis.	Courses to complete 39

Certified School Counselor

Prerequisites: An A certificate; screening requirements.

CR 478. Theory and Practice of Guidance	3
CR 479. Group Methods and Processes	3
CR 460. Educational Statistics.	3
CR 514. Psychological and Educational Testing.	3
(Prerequisite: CR 460 or equivalent)	
CR 500. Research in Education	3
(Prerequisites: CR 460 and CR 514)	
CR 520. Occupational and Educational Information.	3
CR 523. Organization and Administration of Guidance Services	3
CR 522. Counseling Theory and Techniques.	3
(Prerequisite: CR 478)	
CR 538. Supervised Practicum in Counseling.	6
AH 535. Philosophy of Education.	3
Electives, including 2 senior-graduate courses in sociology	12

Student Personnel Worker

(Junior College Counselor—Noncertificate Program)

CR 541. Student Personnel Services	3
CR 460. Educational Statistics	3
CR 514. Psychological and Educational Testing	3
(Prerequisite: CR 460 or equivalent)	
CR 500. Research in Education	3
(Prerequisites: CR 460 and CR 514)	
CR 479. Group Methods and Processes	3
CR 520. Occupational and Educational Information	3
CR 522. Counseling Theory and Techniques	3
(Prerequisite: CR 478)	
CR 538. Supervised Practicum in Counseling	3
CR 580. Internship in Student Personnel Services	3
AH 542. Community/Junior College	3
or AH 543. Organization and Administration of the Community/Junior College	
Elected academic minor and electives	24

Agency Counselor

(Noncertificate Program)

CR 524. Seminar in Guidance	3
CR 460. Educational Statistics	3
CR 514. Psychological and Educational Testing	3
(Prerequisite: CR 460 or equivalent)	
CR 500. Research in Education	3
(Prerequisites: CR 460 and CR 514)	
CR 479. Group Methods and Processes	3
CR 520. Occupational and Educational Information	3
CR 522. Counseling Theory and Techniques	3
(Prerequisite: CR 478)	
CR 538. Supervised Practicum in Counseling	3-6
Elected academic minor and electives	27-30

Reading Specialization

A graduate student who plans to pursue the curriculum for the Reading Specialist in Elementary or Secondary Schools must have had basic preparation in the foundation of reading instruction and reading in the elementary or secondary school.

Reading Specialist in the Elementary School

CR 500. Research in Education	3
AH 547. Social Foundations of Education.....	3
or AH 535. Philosophy of Education	
CR 456. Measurement and Assessment	3
or CR 514. Psychological and Educational Testing	
or Psychology 526. Psychological Assessment I	
AH 506. Curriculum Construction	3
or CE 546. Elementary School Curriculum	
Psychology 455. Advanced Educational Psychology.....	3
or Psychology 503. Child Psychology	
CR 561. Evaluation and Assessment in Reading	3
CR 472-473. Diagnostic and Remedial Reading	3, 3, or 6
CR 508. Clinical Problems in Reading.....	3
Nine hours from among:	
CR 558. Teaching of Reading.....	3
CR 511. Investigations in Reading.....	3
CR 548. Independent Study	3
CR 551. Field Experience in Teaching Reading.....	3-9
Academic concentration or concentration in reading instruction	
.....	18

Reading Specialist in Secondary School

AH 547. Social Foundations of Education.....	3
or AH 535. Philosophy of Education	
AH 506. Curriculum Construction	3
Psychology 455. Advanced Educational Psychology.....	3
or Psychology 502. Psychology of Adolescence	
CR 561. Evaluation and Assessment in Reading	3
CR 472. Diagnostic and Remedial Reading.....	3
Nine hours from among:	
CR 473. Diagnostic and Remedial Reading.....	3
CR 558. Teaching of Reading.....	3
CR 508. Clinical Problems in Reading.....	3
CR 511. Investigations in Reading.....	3
CR 548. Independent Study	3
CR 551. Field Experience in Teaching Reading.....	3-9
Academic major, including Academic Research 500, or con-	
centration in reading instruction, including CR 500.....	27

Special Education: Mental Retardation

Prerequisite: CE 320.

CR 500. Research in Education	3
CE 572. Internship in Special Education	9-15

The remainder of the courses for this program are to be selected in consultation with an advisor to meet the individual needs of the student.

Speech Pathology

Prerequisite: North Carolina A Certificate or equivalent.

CR 500. Research in Education	3
Speech 550. Research and Thesis.....	6
Courses prescribed by advisor—With thesis	36
—Without thesis.....	45

Master of Arts Degree

The *academic* Master of Arts degree is offered with majors in English, geography, history, mathematics, political science, and psychology. The requirements for this degree are essentially the same as those for the Master of Arts degree for teachers, with the following exceptions:

- (1) A thesis is required.
- (2) A reading knowledge of a foreign language, normally French or German, is required. (Candidates for the M.A. degree in mathematics have the option of selecting as an alternate to the foreign language requirement demonstrating proficiency in computer science, statistics, or another academic area, subject to the approval of the academic graduate committee in mathematics. Candidates for the M.A. degree in political science may substitute computer science for the foreign language requirement.)
- (3) The oral defense of the thesis may not be substituted for the required comprehensive examination.
- (4) No courses in professional education may be included in the degree program.

English

Prerequisite: Undergraduate major in English.

ENGLISH 500. Bibliography and Research.....	3
550. Thesis	6
Electives in English.....	27-36
Electives in allied disciplines.....	0-9
Total	45

Geography

Prerequisite: Undergraduate major in geography.

GEOGRAPHY 500. Bibliography and Research.....	3
520. Urban Analysis	3
523. Geographic Aspects of World Affairs	3
550. Thesis	6
Approved electives in geography and geology	18
Related minor.....	12
Total	45

History

Prerequisite: Undergraduate major in history.

HISTORY

524. European Historiography.....	3
or History 512. American Historiography	
500. Bibliography and Research	3
540. Seminar.....	3
550. Thesis	6
Approved electives in history.....	18
Related minor.....	9
Elective in humanities	3
Total	45

Mathematics

Prerequisite: Undergraduate major in mathematics.

MATHEMATICS 550. Thesis	6
Approved electives in mathematics	39
Total	45

Political Science

Prerequisite: Undergraduate major in political science.

POLITICAL SCIENCE 500. Bibliography and Research	3
501. Readings and Research in Political Behavior	3
550. Thesis.....	6
Electives in political science	24-30
Electives in allied disciplines	0-9
Total	45

Psychology (General-Theoretical)

Prerequisite: Undergraduate major or minor in psychology.

PSYCHOLOGY

500. Research Problems	3
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534. Advanced Statistics	3
457. Physiological Psychology	3
458. History and Systems of Psychol- ogy I	3
550. Thesis	6
Approved electives in psychology	18
Minor (sociology, physical or biological sciences).....	9
Total	45

Clinical Psychology

Prerequisite: Undergraduate major or minor in psychology.

Two years are required to complete this program.

CORE COURSES

PSYCHOLOGY

500. Research Problems (3 quarters)	1,1,1
457. Physiological Psychology	3
528. Theories of Learning	3
534. Advanced Statistics	3
550. Thesis	9
Electives in psychology	9

CLINICAL COURSES

PSYCHOLOGY

512. Psychology of the Emotionally and Socially Maladjusted	3
526. Psychological Assessment I	3
535. Advanced Abnormal Psychology	3
536. Theories of Psychotherapy	3
551, 552, 553. Clinical Practicum I	1,1,1
544. Clinical Practicum II	3
555. Advanced Developmental Psychology	3
556. Experimental Analysis of Mental Defects....	3
557. Clinical Psychology	1
558. Projective Techniques	3
559. Advanced Psychology Assessment	3
560, 561. Internship (6,6)	12
Total	70

Master of Science Degree

The Master of Science degree is offered with majors in chemistry and biology. Requirements for this degree, essentially the same as for the academic Master of Arts degree, include:

- (1) A thesis.
- (2) A reading knowledge of German, French, or Russian.

- (3) An orientation examination during the first two weeks of the program.
- (4) A comprehensive examination.
- (5) An oral defense of the thesis.

Chemistry

Prerequisite: Undergraduate major in chemistry.

CHEMISTRY 450. Qualitative Organic Analysis (or equivalent).....	4
504. Chemical Bond Theories.....	3
506. Organic Reaction Mechanisms.....	3
510. Chemical Thermodynamics.....	3
513. Optical Methods of Chemical Analysis.....	4
or CHEMISTRY 514. Electrical Methods	
530. Advanced Inorganic Chemistry.....	3
550. Research and Thesis.....	6
Approved electives in chemistry, physics, and mathematics	19
Total	45

(Candidates who completed Chem. 450 as undergraduates select an additional 4 quarter hours of electives in chemistry.)

Biology

Prerequisite: Undergraduate major in biology.

BIOLOGY 454. Genetics.....	3
455. Plant Physiology.....	4
500. Bibliography and Research.....	3
501. Advanced Animal Ecology.....	3
503. Bacteriology of Food, Water, Milk, Sewage ..	3
505. Animal Physiology I.....	3
506. Animal Physiology II.....	3
514. Plant Anatomy and Morphology	3
550. Research and Thesis	6
Approved electives in biology, chemistry, and geology	14
Total	45

Second Master's Degree

A student holding a master's degree may earn a second master's degree in another discipline. For admission to a second master's degree, the student files an application and submits transcripts and score reports on the appropriate examinations. He files an application for candidacy during the first quarter and takes a comprehen-

sive examination near the close of the last quarter of the program. He plans his program of 45 quarter hours with his advisor and may or may not include a thesis for 6 hours of credit. If he includes a thesis, at least 39 quarter hours of the work must be completed at Appalachian. If he does not write a thesis, he may include up to 12 quarter hours of graduate work not more than six years old from another approved graduate school or 12 quarter hours of extension work completed through Appalachian. One may meet residence requirements in 24 weeks.

Sixth-Year Program for School Administrators

The College of Education offers sixth-year programs for the preparation of school administrators. Patterns of study are available which prepare students successfully completing the programs to qualify for Advanced Certificates as superintendents, assistant superintendents, or principals. All credits applicable in this program must be earned in residence at Appalachian except that up to 9 quarter hours completed in residence at a graduate school approved to offer similar programs may be transferred if earned within six years of the date on which the program is completed. Thirty-six weeks of residence are required. Details concerning these programs may be secured from the Dean of the College of Education, Duncan Hall, or the Dean of the Graduate School.

Certificate of Advanced Study

One who holds a master's degree and wishes to extend his knowledge in the area of his degree or achieve breadth in related disciplines may apply for admission to advanced study and plan a program to include 45 quarter hours, up to 12 hours of which may be completed at another approved graduate school or in Appalachian's extension program. A minimum of 24 weeks of residence is required. He submits acceptable scores from the MAT and the NTE or the GRE, files an application for admission to candidacy during the first quarter, and takes a comprehensive examination near the close of the last quarter of his program. One completing the program may apply for a University Certificate of Advanced Study to be awarded at commencement. Whether the University Certificate of Advanced Study will qualify teachers for salary increments in their respective states will depend on the programs completed and the salary policies followed by the school systems.

The Specialist's Degree

The specialist's degree is intermediate between the master's and the doctor's degrees. Three Specialist in Education and one Specialist in Science degree programs have been approved.

To get into one of these programs, a student must have a master's degree from an approved institution and satisfy admission require-

ments of the Graduate School. Regulations and procedures governing the master's degrees also apply to the specialist's degree. Twelve quarter hours taken beyond the master's degree at an approved institution may be transferred. Course requirements range from 45 to 54 quarter hours of graduate work beyond the master's degree, and 36 weeks of residence are required.

Specialist in Education (Ed.S.) programs are offered in three fields: (1) educational leadership, (2) elementary education, and (3) higher education. The Specialist in Science (Spec. Sc.) is offered in biological sciences.

The program in educational leadership prepares one in school administration, supervision, or curriculum. The program in elementary education prepares one to teach in the primary school (K-3) or the intermediate school (4-9). The program in science provides for preparation for teaching in a public school or in a college. A program in education is flexible. One may include in it a minimum of 18 additional hours in the teaching field, or reading, or guidance and counseling, or educational media provided the program is based on and related to the major at the master's level.

Interested students are requested to write to the Dean of the Graduate School for further information and application forms.

Field-Based Master's Degree

A limited number of M.A. candidates in educational fields are admitted to "field-based" programs in which up to 18 quarter hours of appropriate graduate work may be transferred from other approved graduate schools, and no limitation is placed on the number of credits earned in extension through Appalachian. Designed primarily for year-round employees in education, the program provides opportunity for full-time education personnel to update their credentials through in-service training. For full details, please request information from the Dean of the Graduate School. (This program is not available to candidates for the C.A.S. and the Ed.S.)

Course Numbering

Graduate students may be admitted to courses designated 450 to 499 if they did not take them as undergraduate students. No more than five such courses may be included in a thesis program and, normally, no more than six in a program that does not include a thesis. Occasionally, a graduate student may be permitted to include in his program courses with numbers between 300 and 450 provided the courses are approved by his committee and the department chairman and a special form is filled out and signed at the time the student registers for each course. (Courses required for the

North Carolina A Certificate may not be approved for graduate credit.) Courses designated 500 and above are limited to graduate students only.

Language Requirements

Candidates for the Master of Arts degree in English, geography, history, mathematics, political science, or psychology and for the Master of Science degree in biology or chemistry will be expected to demonstrate by examination a reading knowledge of a modern foreign language, usually French or German. A language other than one normally required may be substituted with the approval of the student's advisor and the Dean of the Graduate School. Computer science, statistics, or another academic area, subject to the approval of the graduate committee in mathematics, may be substituted by candidates in mathematics; computer science may be substituted by candidates in political science. Two years of successful college study in a language will meet the requirement. One who has not completed two years of college credit in a language must take a language examination.

The student should apply for the language examination directly to the chairman of the Department of Foreign Languages not later than three weeks before the date the examination is scheduled. The chairman of the Department of Foreign Languages, after reviewing the student's examination paper, will submit to the Dean of the Graduate School a report of the student's performance. The Dean of the Graduate School will inform the student and his advisor by mail whether the student has passed the examination. The student must have passed the examination in a foreign language before he is permitted to file an application for a master's degree.

Application for the Degree

The graduate student must file with the Dean of the Graduate School an application for the master's degree, the specialist's degree, or the Certificate of Advanced Study the first week of his final registration period. The application form may be secured from the Graduate Office. If he has qualified to apply for a certificate to teach in North Carolina, the candidate may also file an application for a certificate. This form, too, may be secured from the Graduate Office.

Commencement

Candidates for graduate degrees and Certificates of Advanced Study are expected to be present at any commencement to receive the degree in person unless excused in writing by the Dean of the Graduate School.

Academic Regulations

Registration

Graduate students register at the time specified on the university calendar. Initial registration is contingent upon the receipt and approval of transcripts of all work completed in other institutions and a report of acceptable scores for the Miller Analogies Test. Registration material is provided by the Office of the Registrar. A fee will be charged for late registration. See Special Fees.

Full-Time Resident Student

For full-time resident credit a student must be registered for a minimum of 12 quarter hours (6 in a summer term) unless he is a graduate teaching fellow or assistant. Graduate students may not register for more than 16 hours a quarter or 10 for a summer term.

Auditors

Regular fees are charged for auditing. A student may register as an auditor for a course with the consent of the instructor and the Dean of the Graduate School. Classes audited shall count as part of the student's load, but he will receive no credit and no grade will be assigned. An auditor is expected to be regular in class attendance but may not participate in class discussions unless he is invited to do so. He is not required to take tests and examinations. An auditor who finds it necessary to discontinue his class attendance should formally drop the course.

Auditors may not register for research courses, seminars, practicums, and workshops.

Unclassified Graduate Students

A student doing graduate work but who has not applied for admission to Graduate School and who is not working on a definite program of graduate study leading to a graduate degree or a Certificate of Advanced Study has no assurance he may be able later to count such work as fulfilling course requirements for the degree.

Employed Students

Public school personnel employed on a full-time basis may not take more than 9 quarter hours from September 1 to June 1. A full-time university instructor may not take more than 3 quarter hours during one registration period.

Foreign Students

Foreign students are encouraged to apply for admission to master's degree programs starting in September rather than at the beginning of the winter or spring quarter. Applications should be received in the Office of the Dean of the Graduate School by April 1 and all supporting documents and credentials by May 15. Applicants whose native language is not English should arrange to take *Test of English as a Foreign Language* in October in order for the university to receive the score by April 1. A foreign student whose native language is not English should request that a report of his score be sent *before* he asks for application forms, for application forms are sent only to foreign students with a score of 500 or higher on *Test of English as a Foreign Language*.

Appalachian State University has no scholarship program for the support of foreign students. Even out-of-state fees may not be waived. After a foreign student has studied at Appalachian State University for one quarter, he may apply for a graduate assistantship. If he is awarded an assistantship, out-of-state fees will be waived while he is an assistant.

The foreign student must submit a Confidential Statement on Finances before his application for admission to Graduate School will be considered. All foreign students must have health insurance before they can be admitted.

Foreign students enrolled in other colleges and universities in the United States will not be admitted to Appalachian until they have completed, or are about to complete, study leading to a degree in the college or university they are attending.

Unmarried foreign students live in university residence halls and may take their meals at the university cafeteria. Expenses for one academic year (9 months) for the foreign student are approximately \$3000.

Class Attendance

Attendance by all graduate students must be regular. Responsibility for class attendance rests with the student. In all cases work missed through absence must be made up, but permission to make up work is not automatic and is given at the discretion of the instructor. Excuses for absence from class meetings are granted by the instructor and at his discretion. A student whose attendance in classes is unsatisfactory to his instructor, his advisor, or the Dean of the Graduate School may be excluded from a course, a final examination, or a graduate program.

Student Responsibility

The graduate student is entrusted with the responsibility for his own progress. He keeps an up-to-date record of the courses he has taken in his proposed program and checks periodically with his advisor. Responsibility for errors in his program or in interpretation of regulations rests entirely with the student.

Adding and Dropping Courses

A course may be added or dropped without penalty, with the approval of the student's advisor, prior to the last day of the registration period. A course may be changed from *Audit* to *Credit* prior to the last day of the registration period but not afterwards. A course may be dropped with a grade of *W* (withdrawn) prior to the fifth week of classes in a quarter or the middle of the third week in a summer term with the approval of the instructor and the student's advisor. After that date a grade of *F* is assigned, unless an exception is granted by the Dean of the Graduate School, in which case a grade of *W* is assigned.

Withdrawal

Requests for complete withdrawal from graduate school must be made by letter to the Dean of the Graduate School. A student who has completely withdrawn from a graduate program may not resume his studies unless he has been formally readmitted. Students who withdraw without approval receive grades of *F*.

Suspension and Dismissal

Appalachian reserves the right to exclude at any time a graduate student whose conduct is deemed improper or prejudicial to the best interest of the university.

A graduate student who fails to maintain grades of at least *B* in the courses for which he is registered in any term may not be permitted to re-register as a candidate for the master's degree. However, a student may petition the Dean of the Graduate School for consideration in extenuating circumstances which may constitute a justifiable exception to this regulation. If the Dean of the Graduate School approves, the student may be permitted to register at his own risk for an additional quarter.

Grades

In the Graduate School, the grades *A*, *B*, *C*, *F*, and *I* are used to report the quality of credit. *A* is superior graduate accomplishment, *B* is average graduate accomplishment, *C* is below average but pass-

ing, and *F* is a failing grade. A grade of *I* is reported for a student who has not completed the quantitative requirements of a course. Graduate credit accepted in fulfillment of the requirements for a graduate degree or a Certificate of Advanced Study shall average not lower than *B*, and no credit toward the degree shall be granted for a grade below *C*. Course work reported "Incomplete" must be completed within a year of the official ending of the course. A graduate student is permitted to repeat not more than one course to improve his grade. A grade of *F* is assigned to a student who arbitrarily discontinues meeting a class or who withdraws without making proper arrangements with the Dean of the Graduate School.

Changing Grades

Once an instructor has reported a grade to the Registrar, it cannot be changed except in case of error in reporting or recording. Any change made must also be reported to the Dean of the Graduate School.

Changing Majors

A student who has been approved by one department but who wishes to change to another must have the approval of the Dean of the Graduate School and of the department into which he proposes to transfer before the change may be made. In addition, the chairman of the department from which the student wishes to transfer must certify that the student is eligible to continue as a degree candidate in that department.

Examinations

In addition to the Miller Analogies Test and the National Teacher Examinations Common and Area or the Graduate Record Examination Aptitude and Advanced, which are required by all departments, qualifying examinations are administered by several departments to determine the student's qualifications for graduate study. In addition, all departments require comprehensive examinations in the major near the termination of the graduate program. These examinations may be written, oral, or a combination of the two. Composition of committees for comprehensive examinations is determined by the chairman of the major department. Each examining committee must have at least three graduate faculty members from the major department and committees of students planning to certify for secondary teaching must include also one graduate faculty member from the Department of Secondary Education. It is the responsibility of the degree candidate to arrange with his department chairman a date for the comprehensive examination, which may not be taken before the student has been admitted to candidacy or completed at least two-thirds of his course work.

Oral examinations are required of all students presenting thesis or research projects. Thesis committees are composed of at least three graduate faculty members from the major department. At the discretion of the department, the oral examination on the thesis may be substituted for the comprehensive examination.

Library Carrels

Library carrels are available to graduate students who are working on thesis and special research projects. Applications for carrels are made on a quarterly basis to the Librarian.

Credit by Examination

Upon the recommendation of a graduate student's committee and with the approval of the chairman of the department in which it is listed, a course numbered 450-499 may be challenged by examination for graduate credit. Courses numbered 500 and above may not be challenged by examination. Grades are not recorded for credit earned by examination.

Individual Study

After a graduate student has been admitted to degree candidacy, he may arrange to take courses numbered above 449 on an individual basis provided his advisor, the chairman of the department in which the course is offered, and the instructor all agree. Appropriate forms for requesting permission to take a course by individual study are furnished by department chairmen.

Independent Study

With the approval of the instructor, the department chairman, the dean of the college, and the Dean of the Graduate School, a graduate student who has been admitted to candidacy may register for independent study in his major field. Students registered for independent study must be scheduled for regular conference periods at least weekly. As much as 6 quarter hours of independent study may be applied toward a graduate degree.

Transfer Credit

A student enrolled in a degree program in which a thesis is not required may normally be permitted to transfer from another graduate school up to 12 quarter hours (8 semester hours) of appropriate graduate credit provided grades earned are at least *B* and provided the credit will not be more than six years old at the time the degree or the Advanced Certificate is awarded. A student in a thesis program may be permitted to transfer up to 6 quarter hours of appropriate resident work completed in another approved gradu-

ate school. Students wanting to transfer more than 12 quarter hours may appeal to the Dean of the Graduate School.

Extension

As a service to the people of Piedmont and western North Carolina, Appalachian conducts off-campus classes. As far as possible, these classes are planned around extension centers so that adequate equipment, supplies, and materials for collateral reading may be provided. These classes usually meet for a period of three hours per week for a quarter. They are taught by members of the regular faculty or by persons appointed especially for this service.

The cost of extension classes, including tuition and fees is \$12.00 per quarter hour. A student registering at Appalachian for the first time must pay an additional fee of \$10.00.

For graduate students who register for extension work, up to 12 quarter hours of graduate credit may be counted toward the master's degree. Extension work applied toward the master's degree will not reduce the minimum residence requirement of 36 weeks. One may transfer some credit from another graduate school and complete some extension credit, but the combined total may not exceed 12 quarter hours. Correspondence courses are not accepted for graduate credit.

SATURDAY, LATE AFTERNOON, AND EVENING CLASSES

Appalachian also schedules Saturday, late afternoon, and evening graduate courses on campus during the fall, winter, spring, and summer quarters. By attending a Saturday or evening class during any one quarter, the graduate student may earn 3 hours of graduate credit. Six weeks of residence is recognized for 6 hours of graduate credit for Saturday classes. As much as 18 quarter hours of credit earned in Saturday classes may be applied toward a graduate degree. The cost of Saturday work, including tuition and fees, is \$10.00 per quarter hour for in-state students and \$15.00 per quarter hour for out-of-state students. Books and supplies cost approximately \$15.00. A student registering for the first time must pay a registration fee of \$10.00.

Internship

In addition to internships in junior college teaching, qualified applicants may serve internships in school administration and in supervision of student teaching. To be eligible for an internship an applicant must:

1. Hold a valid North Carolina *A* Certificate or better.
2. Have successfully completed three or more years of teaching with at least one year in the school system in which he plans to do his internship.
3. Have the recommendation of his principal and/or superintendent.
4. Have been admitted to candidacy for or hold the master's degree.

The following administrative policy governs internships.

1. An applicant for an internship must be working within a reasonable distance of the university.
2. The number of registrants for AH 575 and SE 576 is limited.
3. The intern must work under a fully certified supervisor.
4. The supervisor must express a willingness to supervise the work and provide the experiences necessary for the intern.

An internship in the supervision of student teachers is available to supervising teachers who have successfully supervised at least one student teacher during the past two years. The program, designed to permit teachers to participate while regularly employed in a school system, carries 3 hours of credit during the quarter. Further details of this program may be secured from the Office of Field Experiences.

Election of Graduate Courses by Seniors

Provided he is otherwise qualified for admission to graduate study, a senior at Appalachian State University who is within 12 quarter hours of graduation besides student teaching may apply to the Dean of the Graduate School for permission to carry up to 12 quarter hours of graduate course work while completing the baccalaureate degree. Such a student may not register for more than 16 quarter hours for a regular quarter nor 10 quarter hours for a summer term. Credit earned in this manner may not be used to meet requirements for the baccalaureate degree and, at the same time, be applied toward a master's degree.

A senior who wishes to enroll in a graduate course as an elective for undergraduate credit requirements for a major for the baccalaureate degree may apply to the chairman of his department and the Dean of the Graduate School to do so. However, any graduate course approved for this purpose may not later be applied toward a master's degree.

Department of Administration, Supervision, and Higher Education

Nathaniel H. Shope, Chairman

The Department of Administration, Supervision, and Higher Education is responsible for organizing and providing instructional programs leading to certification of personnel for administrative and supervisory positions in education, organizing and providing related courses, programs, and services designed to meet the needs of administrative and supervisory personnel in elementary and secondary schools and in higher education, and organizing and providing programs and services designed in cooperation with schools or other agencies relating to any areas of improvement and progress in educational institutions. The department also provides advisory and administrative services essential to the effectiveness of its program.

Master of Arts degrees are offered in several areas of the two-year college programs and in public school administration and supervision. The Specialist in Education degree is offered in educational leadership and higher education. The areas of concentration in the specialist's degrees are administration, supervision, curriculum, reading, educational media, guidance-counseling, developmental studies, and adult education.

For graduate degree plans, see pages 59-70.

Courses of Instruction in Administration, Supervision and Higher Education

490. Education of the Disadvantaged/(3).W;SS.

A study of the educational needs of the disadvantaged child. Consideration is given to identification, curriculum, methods of teaching, and materials. The course is designed for administrators and instructional personnel.

495. Teaching in the Occupational Programs/(3).F.

A study of effective methods and techniques of teaching vocational and technical subjects. Attention is given to class organization, student-instructor planning, methods of teaching manipulative skills and related

information, shop laboratory safety, and evaluation.

496. Student Intern: Occupational Programs/(15).F;W;S;SS.

A full-time teaching internship for one quarter under the supervision of experienced personnel in a community college or technical institute.

497. Seminar on the Technical In- stitute/(3).S.

Discussion and analysis of the problems, research, and recent trends in the technical institute.

Graduate Courses

501. Public School Administration/(3).F;SS.

A study of basic structure, organization, and administration of American public education; the role of the various agencies and administrative personnel; financial support; special problems. Prerequisite: three years' teaching experience. *Hooks, Shope, Swain.*

502. Organization and Administration of the Secondary Schools/(3).F;SS.

A study of secondary education and administration, research, curriculum, schedule making, opening and closing of school. Prerequisite: three years' teaching experience. *Hooks, Durante, Swain.*

503. Problems of the Public School Administrator/(3-6).SS.

A study of the practical problems involved in administering the public schools. Prerequisite: three years' teaching experience. *Randall, Shope.*

504. Organization and Administration of the Elementary School/(3).W;SS.

A study of the role of the administrator in modern elementary education. Prerequisite: three years' teaching experience. *Hooks, Durante.*

505. Supervision of Instruction/(3).S;SS.

A study of the nature and function of supervision, recent trends, teacher participation

in policy formation, the organization and planning of supervision. Prerequisite: three years' teaching experience. *Hooks, Durante, Shope, Swain.*

506. Curriculum Construction/(3).F;S;SS.

A study of principles, effective practices, and techniques appropriate for overall curriculum planning. *Hooks, Durante, Randall.*

512. Organization and Administration of the Middle/Junior High School/(3).F;SS.

A study of the organization and administration of the middle and junior high school programs. Overview of the function of these schools in American education. *Durante, Hooks, Swain.*

517. School Supervision/(3).SS.

This course is planned for students preparing for positions as general county and city supervisors. *Shope, Reynolds.*

518. Public School Finance/(3).S;SS.

A study of educational theory and operating principles which will contribute to the understanding of the nature of problems of public school finance. Prerequisite: three years' teaching experience. *Staff.*

525. Problems in Educational Administration/(3-6).F;W;S.

A study of current trends, issues, and problems related to the organization and administration of the instructional program. The course is designed for school administrators and other present and prospective educational leaders. May be offered as a six-hour field study. *Shope.*

**535. Philosophy of Education/
(3).F;W;S;SS.**

Current educational issues and decisions are analyzed from the viewpoint of the philosophical bases which may underlie them. *Miller, Horton.*

542. The Community/Junior College/(3).F;W;S;SS.

An analysis of the two-year college. Emphasis is given to a study of characteristics and roles of personnel and programs within the various types of public and private community/junior colleges. *Cooper, McLeod.*

543. Organization and Administration of the Community/Junior College/(3).F;SS.

A study of the various types of two-year colleges and how they are administered at the state and local levels. Emphasis is placed on North Carolina's community colleges. *Harris, McLeod.*

544. Seminar on the Community/Junior College/(3).F;W;S;SS.

Discussion and analysis of the problems, research and recent trends in the community/junior college. *Cooper.*

545. Practicum in College Teaching/(3).F;W;S.

Supervised experience in college teaching. Open only to graduate assistants and graduate fellows. *Cooper.*

547. Social Foundations of Education/(3).F;SS.

The purpose of the course is to acquaint students with the role of the school in relation to its social setting and organization. *Shope, Durante, Swain.*

**548. Independent Study/(1-6).
F;W;S;SS.**

**549. School Building Planning/(3).
W;SS.**

Emphasis upon educational planning of teaching space and facilities, planning buildings for newer instructional equipment, power requirement, efficient use of existing facilities, economical housekeeping and maintenance programs. *Reynolds, Shope, Randall.*

**550. Master of Arts Thesis/(6).
F;W;S;SS.**

**552. Supervision of Instruction in
the Community/Junior College/
(3).SS.**

Organization and planning of supervision, the development of skills in cooperative planning, and the evaluation of activities for the college student. *Cooper.*

**553. Planning the Community/
Junior College/(3).S.**

Analyzing communities and determining aims and objectives in planning curricula in general education and vocational education for the community/junior college. *Harris.*

560. School Law/(3).W;SS.

The purpose of the course is to analyze the fundamental principles underlying the relation of the state to education and to reduce to systematic organization the principles of the case or common law which are applicable to practical problems of school organization and administration. The course will also consider the duties and responsibilities of personnel in the school system. *Staff.*

563. The Adult Learner/(3).F;SS.

A study of the characteristics of adults as learners. Special attention is given to a review of research on adult learning and to the role of the adult educator as a facilitator in the learning process. *Staff.*

**565. Selected Topics/(3 or 6).
F;W;S;SS.**

Subject matter may vary from term to term depending on student interest and need. A student may enroll more than once in a selected topics course provided that the content does not duplicate that of the previous course. Limit of 6 hours credit. *Staff.*

**574. Internship in Community/
Junior College/(3-6).F;W;S;SS.**

Supervised experience in a community/junior college or technical institute for students planning to be employed in one of these educational institutions. *Staff.*

575. Internship in Educational Administration/(6).F;W;S.

Leadership and management experiences under the direction of competent principals, supervisors, superintendents, or other appropriate administrators. *Staff.*

581. Programs for Adult Education/(3).F;S;SS.

A study of the procedures employed in the development, operation, and evaluation of adult education programs. *Staff.*

584. College Finance and Business Management/(3).F;S;SS.

A study of financial and business management principles as related to higher education. Emphasis is given to sources of funds, budgeting, purchasing, and financial accountability in higher education. *Staff.*

585. Computer Applications in Educational Administration and Finance/(3).S;SS.

An investigation of the use of packaged programs related to administrative problems; e.g., scheduling, registration, and student records and their use in facilitation of innovation in instruction. In addition to the examination of pre-packaged software, the

course will consider the design of systems for unique local situations. *Staff.*

586. Computer Applications in Instructional Programs/(3).S.

An overview of computer-assisted instructional programs and learning theories related to the development of such programs. *Staff.*

588. Method and Process in Community Relations/(3).F;SS.

Analysis of the interactive process within and between groups, emphasizing the formation and functioning of groups, development of skills essential for effective leadership, techniques of school-community relations. Attention is given to parent contacts, citizen participation, press, radio, television, printed materials, and other media. *Shope, Hooks.*

**589. Developmental Studies in the Community/Junior College/
(3).W;SS.**

A study of the role of developmental studies programs in the community/junior college. Special emphasis is given to characteristics of students and approaches to instruction. *Staff.*

**590. Seminar in Adult Education/
(3).S;SS.**

This course provides opportunities for students to examine current issues and problems in adult education. *Staff.*

601. Seminar in Educational Leadership/(3 or 6).F;S.

Shope.

618. Seminar in Finance and Taxation/(3).F;SS.

Advanced studies in taxation, statutory programs for school support, budget making,

fiscal management, and business operation of school systems. *Shope*.

**625. Advanced Problems in Educational Administration/(3-6).
F;W;S.**

Open to sixth-year students only. *Shope*.

**648. Independent Study/(1-6).
F;W;S;SS.**

649. Seminar in Facilities and Maintenance/(3).S;SS.

Planning the modern school plant, design and nature of functional educational facilities, personnel involvement, maintenance, determining the needs of the community, factors in the selection of sites, architectural and contractual services. *Reynolds, Shope*.

660. Seminar in Legal Problems in Education/(3-6).S;SS.

Legal bases for organizing and conducting public and private school systems, statutes and court decisions affecting educational functions. *Staff*.

674. Internship in Higher Education/(3-12).F;W;S;SS.

Supervised experience in a college or university for students planning to be employed in one of these types of educational institutions. *Staff*.

675. Internship in Educational Leadership/(6-12).F.

Staff.

682. Adult Education Agencies/(3).F.

Identification and analysis of agencies offering adult education. Emphasis is given to the

organization, administration, and purpose of adult education in these agencies. The relationships among adult education agencies is also considered. *Staff*.

683. Post-Secondary Technical and Vocational Education/(3).W;SS.

A study of the role of technical and vocational education in society. Consideration is given to determining needs for specific training in a given community and developing programs appropriate to meet those needs. *Staff*.

684. The General Education Program for Higher Education/(3).S;SS.

An overview of general education and its place in post-secondary education. Emphasis is given to building on earlier educational experiences in constructing a viable college general education program. *Harris*.

686. Higher Education in America/(3).F.

Historical approach to the development of higher education from colonial colleges to the present. *Cooper*.

687. Seminar in College Administration/(3-6).S;SS.

A study of the governance of higher educational institutions. Consideration is given to legal bases, organizational patterns, development politics, administrator and faculty responsibilities. *Harris*.

690. Seminar in Education for the Disadvantaged/(3-6).W;SS.

A study of problems related to education of the culturally different and educationally disadvantaged student and the administrative facet of these problems. Modification in curriculum in the development of compensatory and remedial programs are prime concerns. *Shope*.

691. Advanced Seminar in Adult Education/(3).SS.

This course provides opportunities for students to examine in depth current issues and problems in adult education. *Staff.*

692. Curriculum Development in Adult Education/(3). W.

A study of principles and practices in curriculum development in adult education. Special attention is given to needs assessment and to innovative curricula in adult education. *Staff.*



Department of Art

Lawrence F. Edwards, Chairman

An academic concentration in art leading to the Master of Arts degree for elementary school teachers consists of 24 quarter hours including Art 525, 550, 560; 3 quarter hours from any 500 level art history; 3 quarter hours from any 500 level studio course; and 9 additional quarter hours in electives from studio and/or art history on the 500 level.

A 12 hour academic minor in art leading to the Master of Arts degree for elementary school teachers consists of 12 quarter hours including Art 525, 560; 3 quarter hours of graduate level studio course selected from the areas of painting or graphics or sculpture or constructive design; 3 quarter hours in graduate level art history.

Additional professional requirements for the Master of Arts degree for elementary school teachers are listed in the section for the Master of Arts degree for elementary school teachers.

Art 201, 453, 456 and 459 are not approved for completing requirements for an art major, minor, or concentration.

Courses of Instruction in Art

450. Problems in Art/(3-6).

F;W;S.

Individual problems or projects. No more than 3 hours may be taken in a quarter. Admission on approval of chairman.

for grade levels are examined. Each student pays for materials used, and all articles made by him become his property. Lecture one hour, laboratory five hours.

451. Seminar/(3-6).S.

A specialized course involving advanced study by small groups in selected areas. Students may enroll twice for credit totaling 6 quarter hours but may not receive credit for a seminar which duplicates the content of one for which they have previously received credit.

456. Workshop in Painting/(3). SS.

An intensive two-week course. Student chooses, with the instructor's approval, the painting medium to be used. Field trips offer opportunities to paint local scenery. Lecture one hour, laboratory five hours.

453. Art Education Workshop/(3).SS;Ex.

An intensive two-week course devoted to art instruction in grades one through twelve, including the correlation of art with teaching at all levels. Art materials and supplies

459. Workshop in Sculpture/(3).SS.

An intensive study of the various concepts and techniques involved with creative sculpture dealing with all the basic forms in modeling as well as wood and stone carving. Each student pays for materials used, and all articles made by him become his property. Lecture one hour, laboratory five hours.

Graduate Courses

**501. Ancient and Medieval
Art/(3).F.**

An intensive investigation of art forms from prehistory through Medieval period. A graduate research paper will be required. Lecture three hours. *Edwards.*

502. Renaissance Art/(3).W.

Advanced study emphasizing the European involvement with art during the Renaissance. A graduate research paper will be required. Lecture three hours. *Dennis.*

**503. Modern Art 19th
Century/(3).F.**

The development of art as it grew towards modernism, mainly in France, during the nineteenth century. A graduate research paper will be required. Lecture three hours. *Long.*

504. American Art/(3).W.

Relationships between United States history and the development of American art from colonial times to the present. A graduate research paper will be required. Lecture three hours. *Dennis.*

**506. Modern Art 20th
Century/(3).S.**

A study of the art of the twentieth century as a worldwide phenomenon. Special emphasis is given to recent trends. A graduate research paper will be required. Lecture three hours. *Long.*

507. Painting/(3).F.

Development of the individual painter's aesthetics through advanced studio work. Lecture one hour, laboratory five hours. *Dennis.*

508. Sculpture/(3).W;S.

Special problems as related to selected materials and techniques. The emphasis will be on individual student experimentation on an advanced level. Lecture one hour, laboratory five hours. *Carrin.*

**509. Constructive Design in
Fabric/(3).F;W;S.**

An extension of Art 400 plus related research. Lecture one hour, laboratory five hours. *Force.*

513. Printmaking/(3).F;W.

Advanced studio work in printmaking designed to develop an individual sense of graphic form. Lecture one hour, laboratory five hours. *Long.*

**520. Philosophy and Problems of
the Craftsman/(3).S.**

An extension of Art 420 plus individual research in one constructive design area. Lecture three hours. *Carrin.*

**525. Teaching-Learning Process in
Art Education/(3).S.**

An extension of course material in Art 425 plus related research and bibliography. Lecture three hours. *Force.*

**548. Independent Study/(1-6).
F;W;S;SS.**

550. Problems in Art/(3-6).F;W;S.

Individual problems or projects for the graduate student. No more than 3 hours may be taken in a quarter. Admission on approval of chairman. *Staff.*

**555. Constructive Design with
Plastic Media/(3).F;W;S.**

An extension of Art 355 plus related research. Lecture one hour, laboratory five hours. *Staff.*

**560. History and Philosophy of
Art Education/(3). On demand.**

An examination of the current theories and trends in art education in relationship to their involvement in history and to future developments. Lecture three hours. *Staff.*



Department of Biology

I. W. Carpenter, Chairman

The objectives of the Department of Biology are to provide a cultural background in the life sciences as a part of every student's general education; to prepare students to teach biology; to prepare students to meet admission requirements of professional schools; to prepare professional biologists; to provide courses in biology for teacher certification in other areas such as home economics, physical education, and science.

A major in biology for the Master of Arts degree for secondary teachers requires a minimum of 45 quarter hours credit with a thesis or 54 hours without a thesis. Thirty-six of the credits must be in biology and include Biology 454, 455, 500, 501, 503, 505 or 506, and 514. Twelve hours credit are required in education.

A major in biology for the Master of Arts degree in the junior college teaching program requires the same as above except only two courses are required in education.

A major in biology for the Master of Science degree requires 45 hours in biology including a thesis. Required courses include Biology 454, 500, and 550.

A major in biology for a Specialist in Science degree consists of a minimum of 36 quarter hours in biology. Required courses include 610 and 648.

Courses of Instruction in Biology and General Science Biology

450. Nature Study/(3).SS.

Observation of common plants and animals, methods of collecting, organizing, and presenting nature study materials in the grades. Not open to biology majors for credit.

451. Ornithology/(3).S;SS.

An introduction to the anatomy, physiology, behavior, ecology, and identification of birds. Lecture two hours, laboratory two hours. Early morning and at least one Saturday all-day field trips are required.

452. Microtechnique/(3).W;SS.

Technical methods used in preparing materials for microscopic study; practical training in preparation of permanent slides of small organisms and tissue of higher organisms. Lecture two hours, laboratory four hours. Offered 1974 S.S.

453. Histology/(3).W;SS.

Microscopic anatomy of the vertebrate body, including a study of the principal tissues and organs. Prerequisite: Senior standing and 24 quarter hours of undergraduate biology. Lecture two hours, laboratory two hours. Offered 1973 S.S.

454. Genetics/(3).F;S;SS.

A study of principles of variation and heredity governing plants and animals with special reference to man. Prerequisite: Biology 101-102-103.

455. Plant Physiology/(4).F;S;SS.

A study of the basic principles of plant physiology and fundamental processes such as cell properties, water relations, growth, photosynthesis, respiration, and mineral nutrition. Prerequisite: Biology 204-205-206 and Chemistry 101-102-103. Lecture three hours, laboratory two hours. Offered 1974 S.S.

457. Ichthyology/(3).S;SS.

Taxonomy, distribution, and ecology of fresh-water fishes of eastern North America. Management practices will be emphasized. Prerequisite: Senior standing and 24 hours of undergraduate biology. Offered 1974 S.S.

458. Radiation Biology/(3).W;SS.

A study of the use of radioisotopes in biological systems. Laboratory six hours.

459. Mammalogy/(3).W;SS.

The natural history, adaptations, taxonomy, and economic importance of mammals. Lecture two hours, laboratory two hours. Field projects are required. Offered in alternate years (W. 1973; SS. 1974).

480. Field Biology of Continental U.S.A./(9).SS.

Ecological investigations of major habitats in the U.S.A. Prerequisite: 24 hours in biology and consent of the instructor.

Graduate Courses

500. Bibliography and Research/(3).F;SS.

A study of bibliographical problems, types of research, the literature and methods of scientific writing. Required in the first quarter of beginning graduate students. *Hubbard.*

501. Advanced Animal Ecology/(3).F;SS.

Population analysis, population dynamics, simulated environments, community ecology, wildlife management, and environmental modifications and adaptations. Lecture two hours, laboratory two hours. *Randall.* Offered 1973 S.S.

502. Fresh Water Biology/(3).SS.

A study of the physical, chemical, and biological factors affecting productivity in lakes, ponds, and streams. Largely a field course dealing with various approved methods of studying fresh water. Lecture two hours, field work two hours. *Derrick.* Offered 1973 S.S.

503. Bacteriology of Water, Milk, Food, and Sewage/(4).W;SS.

Laboratory and field methods dealing with the sanitary aspects of foods and food handling; sources and kinds of bacteria in milk, water, and sewage with their sanitary significance. Prerequisite: 3 hours of undergraduate bacteriology. Lecture three hours, laboratory two hours. *Montaldi.* Offered 1973 S.S.

504. Taxonomy of Vascular Plants/(3).SS.

A study of the gross structure, reproduction,

and development of the spermatophytes. Special emphasis is placed upon the classification and nomenclature of the spermatophytes. Lecture two hours, field work two hours. *Carpenter*. Offered 1973 S.S.

505. Animal Physiology I/(3).

W;SS.

Physiology of the sensory, nervous, muscular, and circulatory systems; laboratory experiments, reports, and readings. Lecture two hours, laboratory two hours. *Hubbard*. Offered 1973 S.S.

506. Animal Physiology II/(3).

S;SS.

Physiology of respiration, elimination, excretion, reproduction, and hormone coordination. Lecture two hours, laboratory two hours. *Hubbard*. Offered 1974 S.S.

509. Evolution/(3).W;SS.

Evidences of organic evolution will be considered and evaluated from the paleontological, morphological, and physiological standpoints. *Randall*. Offered in alternate years (SS. 1974).

510. Entomology/(3).S;SS.

Biology and systematics of the Insecta and related Arthropoda with emphasis on techniques of collecting, rearing, and identifying common insects. Collection required. Lecture two hours, laboratory two hours. *Glover*. Offered 1974 S.S. Offered in alternate years. Offered 1973 and 1975.

512. Local Flora/(3).SS.

A course designed specifically for elementary school teachers. A study of the common flora and economic plants of North Carolina including the collection, common name identification, and methods of preservation. Lecture two hours, laboratory and field work two hours. *Robinson*.

**514. Plant Anatomy and
Morphology/(3).S;SS.**

A general survey of the external and internal structure of plants; detailed study of anat-

omy and morphology of representative plants from all the divisions. Lecture two hours, laboratory two hours. *Carpenter*. Offered 1974 S.S.

515. Plant Ecology/(3).SS.

A study of units of vegetation and plant succession; factors of the habitat; soils and climate; taxonomy of local flora and preparation of the herbarium material. Lecture, laboratory, and field work five hours. *Hurley*. Offered 1973 S.S.

517. Parasitology/(3).F;SS.

A survey of protozoan, helminthic and arthropod parasites with emphasis on causation and prevention of disease. Lecture two hours, laboratory two hours. *Henson*. Offered 1974 S.S.

518. Advanced Genetics/(3).W.

A review of basic genetic concepts and an extensive investigation of recent advances in animal and plant genetics. Lecture two hours, laboratory two hours.

**519. Comparative Vertebrate Em-
bryology/(3).F.**

An advanced course in comparative embryology of the vertebrates. *Dewel*.

522. Cryptogamic Botany/(4).S.

Taxonomy, morphology, and ecology of the cryptogamic flora exclusive of the fungi. Lecture three hours, laboratory two hours. *Carpenter*.

**524. Advanced Plant Physiology/
(4).F.**

An advanced treatment of the physiology of growth and development of higher plants, with emphasis on the biochemistry of the essential elements. Prerequisite: Biology 455. *Helseth*.

530. Seminar/(1).F;W;S.

Presentation of one research paper for each year of full-time graduate study. One hour credit given during quarter in which paper is presented. Required of all graduate students.

535. History of Biology/(3).S;SS.

A survey of the history of biology with special emphasis upon experiments which have led to the discovery of the more important biological principles and concepts. *Robinson*. Offered 1974 S.S.

**548. Independent Study/
(1-6).F;W;S;SS.**

(Limit of eight hours credit.)

550. Master's Thesis/(6).F;W;S.

601. Biogeography/(3).F.

The biological, climatological, geographic, and geological factors which affect the distribution of animal and plants. Patterns of distribution will be studied in relation to various sizes of geological units. *Randall*.

**603. Advanced Invertebrate
Zoology/(3).S.**

Morphology, physiology, life cycles, systematics, and ecology of invertebrates (exclusive of insects). Lecture two hours, laboratory two hours. *Henson*.

605. Mycology/(3).S.

An investigation of the fungi with particular reference to the techniques of working with these organisms. Lecture two hours, laboratory two hours. *Bond*.

607. Plant Growth and Development/(4).W.

Growth regulatory substances, morphogenetic stimuli, quantitative interpretations of growth, totipotency and diversification in cultured cells. Lecture three hours, laboratory three hours. *Helseth*.

**610. Advanced Seminar in Current
Research Topics/(3).W.**

Lectures, readings, and discussions dealing with biological principles and theories. *Staff*.

614. Current Topics in Cell Physiology/(4).F.

Recent advances in physiology at the subcellular level. Lecture three hours, laboratory two hours. *Hubbard*.

618. Advanced Bacteriology/(4).W.

Modern techniques and procedures in bacteriology, including instrumental and biochemical methods of analysis and interpretation of data. *Montaldi*.

624. Insect Physiology/(4).S.

Special physiological processes peculiar to insects and other arthropods. Lecture three hours, laboratory two hours. *Glover*.

**648. Advanced Independent
Study/(3-6).F;W;S;SS.**

Student selects an area of investigation which must be approved by instructor and advisor.

Approved Electives From Chemistry

454-455. Biochemistry

**506-507. Organic Reaction
Mechanisms**

General Science

**401. Methods of Elementary
School Science/(3).F;W;S.**

A survey of scientific principles and concepts suitable for the elementary grades.

Emphasis is placed upon the construction of units for the various grade levels, methods of teaching these units, related demonstrations and experiments, and the correlation of the science units with other instructional areas.

**450. Science in the Elementary
School/(3).SS;Ex.**

A course designed for teachers with limited science background. Basic concepts, use of simple materials for demonstrations, and the problem solving approach are stressed. Lecture and demonstration three hours. Available as a workshop.

**507. Science in the Junior High
School/(3).SS;Ex.**

A laboratory course designed to aid junior high school personnel in developing an experimental approach to science. Emphasis will be placed upon personnel gaining appropriate skills and academic competency to motivate open-ended investigations for groups and individuals. Available as a workshop.

**510. Environmental Education/
(3).S;SS;Ex.**

A study of environmental problems relevant to man. Designed primarily for elementary education majors.

Department of Business, Economic, and Occupational Education

Orus R. Sutton, Chairman

The Master of Arts degree in economics and business consists of 54 quarter hours, including Business Education 500; a course numbered 500 or above in marketing or finance; Business Administration 515; a course numbered 500 or above in economics; 24 quarter hours selected with the approval of the graduate advisor; and the appropriate courses in secondary or junior college education.

Courses of Instruction in Accounting

452. Taxation/(3).W.

A presentation of the underlying principles of income taxation and the special accounting problems involved in the calculation of federal and state liability, with Acct. 204-205-206.

**454. Government Accounting/
(3).S.**

Application of principles of accounting and budgeting of municipal, state, and federal governmental units. Prerequisite: Two quarters of accounting on the 300 level.

**455. Corporate Tax Accounting/
(3).S.**

A further study of tax accounting, with special emphasis placed on corporations, estates, and trusts. Prerequisite: Acct. 452.

**456. Accounting and Management
Decisions/(3).W.**

A concentrated one-quarter course in accounting for non-business majors. Brief treatment will be given to the accounting cycle preparatory to a survey of managerial

accounting. Subjects covered include budgets, cost behavior, standards, and planning. Prerequisite: Senior/Graduate standing. *Not* open to students who have had Acct. 204-205-206.

481. Seminar/(3). On demand.

482. Theory of Auditing/(5).F.

Basic principles of auditing with emphasis on analyzing and verifying records and reports. Prerequisite: Acct. 204-205-206.

483. C.P.A. Problems/(3).S.

A study of complex accounting problems under simulated C.P.A. examination conditions. Recommended only for those who are preparing to take the C.P.A. examination. Prerequisite: Acct. 306-307-308.

485. Managerial Auditing/(3).W.

A study of the procedures for auditing managerial performances in order to improve the efficiency and effectiveness of organizations. Prerequisite: Acct. 206.

Courses of Instruction in Business Administration

450. Industrial and Labor Relations/(3).F.

Practices and procedures in establishing effective labor-management relations. Prerequisite: Bus. Adm. 315.

452. Consumer Behavior/(3).S.

An examination of the theories of buyer behavior and research results concerning the behavior of consumers in buying goods and services. Prerequisite: Bus. Adm. 320-321.

458-459-460. Principles of Finance/(3-3-3).F-W-S.

Survey of the financial area from the standpoint of the individual business corporation. Consideration of both internal financial management and external relationships with money and capital markets, financial planning, sources of funds, classes and types of securities, valuation of business enterprises. Prerequisite: Accounting 204-205-206 and Economics 203.

461. Credit Management/(3).F.

An analysis of the principles and practices in business consumer credit and collection.

Topics studied include sources of credit, use of credit instruments, financial analysis, and sources of credit information. Prerequisite: Accounting 204-205-206 and Economics 201-202-203.

462. Investment Management/(3).W.

A study of investment principles and practices. Emphasis is placed on the understanding of risks and the establishing of investment policies for both individual and institutional investors. Prerequisite: Accounting 204-205-206 and Economics 201-202-203.

463. Production Management/(3).S.

An analysis of the managerial problems involved in the areas of product developing, plant and equipment, manufacturing planning and controls, production standards, forecasting, routing, scheduling, dispatching and material control. Prerequisite: Bus. Adm. 315, 376.

467. Business Systems Analysis/(3).S.

The designing of data processing systems to satisfy business systems requirements. In-

cludes the techniques of computer based and noncomputer based systems. Prerequisite: Bus. Adm. 367.

471. Computer Simulation/(3).W.

A study of simulation and associated techniques with examples of simulation models as they apply to business and economics. Prerequisite: Bus. Adm. 367 and at least two courses in statistics. (By permission only.)

475. Managerial Decision Making/(3).W;S.

Management problems and methods involved in the operation of business institutions, including human resources, budgets, and organizational structure. The case method is applied heavily, with emphasis on oral and written communication. Prerequisite: Senior standing or permission of instructor.

477. Social Responsibilities of Management/(3).F.

A study of the economic, legal, political, and social environment within which business process takes place; how such environment affects the decisions managers must make. Prerequisite: Senior standing.

478. Problems in Health Care Administration/(3).S.

An advanced seminar for the special study of practical problem solutions in the health care environment. Prerequisite: Bus. Adm. 350 or permission of instructor.

480. Principles of Life Insurance/(3).W.

An introductory study of life insurance. Prerequisite: Bus. Adm. 400 and Economics 203.

481. Seminar/(3). On demand.

482. Principles of Property and Casualty Insurance/(3).S.

Important property and casualty coverages; their application to business and personal risks.

485. Principles of Real Estate/(3).W;S.

The course covers the following areas: economics of real estate; legal instruments used in real estate transactions; the real estate market; the real estate business; and the public and real estate activities. Prerequisite: Bus. Adm. 400 and Economics 203.

486. Real Estate Law/(3).W;S.

An investigation of the legal aspects of real estate sales and development. Covers contracts, leases, state laws, and other related topics. Prerequisite: Bus. Adm. 400.

Graduate Courses

501. Corporation Finance/(3).W.

An intensive survey of the instruments and procedures of corporate finance. The internal and external sources of funds available to a business and corporate capital structures are analyzed. Mergers, recapitalizations, and intercorporate structures are discussed. Prerequisite: Bus. Adm. 458.

502. Marketing Management/(3).F.

Problems involving marketing organizations and methods with emphasis upon functions, institutions, and channels and their relationship to the consumer. Prerequisite: Bus. Adm. 320 or equivalent. *Staff.*

503. Advanced Business Law/(3).W.

Law as it applies to the everyday business transactions of individuals and the organization and operation of a business enterprise. *West.*

515. Business Management/(3).S.

Background, principles, techniques, and basic problems of business management; budgeting and purchasing policies; emphasis on interdependence and interrelationship of management activities and functions.

**516. Personnel Administration/
(3).S.**

Problems and practices in personnel management.

520. Internship/(6).F;W;S;SS.

A program involving intensive work experience in industry under faculty supervision. Prerequisite: Graduate standing.

**548. Independent Study/(1-6).
F;W;S;SS.**

Courses of Instruction in Business, Economic, and Occupational Education

451. Office Management/(3).W.

A study of principles of scientific management as they relate to the office.

**465. Data Processing for Business
Educators/(3).F.**

A survey course covering an introduction to manual, mechanical, punched card and computer business data processing for business educators.

481. Seminar/(3). On demand.

Graduate Courses

**500. Bibliography and Research/
(3).F.**

A study of bibliographical problems, types of research, and organization and reporting of research. Required in the first quarter of all beginning graduate students. *Sutton.*

**505. Current Problems in Business
Education/(3).F.**

Problems in organizing and administering business education programs. *Riner.*

**506. Instruction in the Secretarial
Subjects/(3).S.**

Trends and research in the teaching of shorthand, typewriting, and related subjects. *Tully.*

**507. Instruction in the Basic
Business Subjects/(3).S.**

Objectives, organization of the curriculum, instructional materials, and methods of instruction of the basic business subject. *Riner.*

**508. Business Report Writing/
(3).F.**

A study of principles and practices of business report writing required of men and women in their professional careers in business, industry, education, and government. Emphasis is on concepts, their illustrations and applications. Attention is given to the creative and functional aspects in understanding the problems, gathering and organizing data and presenting reports for management, employees, and the public. *Tully.*

**509. History and Philosophy of
Vocational Office Education/
(3).SS.**

A study of the relationship of the history and philosophy of vocational education to the ideal school curriculum.

510. Administration and Supervision of Vocational Office Education/(3).SS.

A study of principles, practices, and techniques of organizing and supervising vocational office education programs.

512. Materials, Methods, and Equipment in Business Education/(3).SS.

Investigations and demonstrations of recently developed materials, methods, and equipment used in teaching the business subjects in secondary schools. Offered as workshop on demand. *Staff.*

517. Educational Innovations in Accounting/(3).W;SS.

A study of the changes of the philosophy

and policies of accounting and innovative methods in teaching. *Sutton.*

520. Business and Economic Education for the Disadvantaged/(3).W.

A study of the disadvantaged, their environment, habits, motives, and values; and how to help them solve their problems through business and related fields.

521. Methods of Developing Economic Concepts/(3).S;SS.

A study of basic economic concepts and how they can be developed by students of economics and related fields.

**548. Independent Study/(1-6).
F;W;S;SS.**

**550. Master of Arts Thesis/(6).
F;W;S.**

Courses of Instruction in Economics

452. Comparative Economic Systems/(3).W.

A critical analysis of the theory and practice of the economic systems of capitalism, communism, socialism, and facism. Prerequisite: Econ. 201-202-203.

453. Economic Fluctuations/(3).F.

An analysis of the causes, consequences, forecasting, and control of cyclical fluctuation. Prerequisite: Econ. 201-202-203.

455. Public Finance and Taxation/(3).F.

Government revenues, expenditures, budgets, and financing taxes; shifting and incidence of taxation, public debts and eco-

nomie effects of government monetary and fiscal policies. Prerequisite: Econ. 201-202-203.

460. Economics of Education/(3).S.

An application of capital theory to the study of human resource development, with particular emphasis on the formal education process. The rates of return to investment in formal education at the elementary, secondary, and college levels are studied. Economic objectives of formal education are viewed from the standpoint of returns to the individual and to society. Prerequisite: Econ. 201-202-203, 310 or Senior/Graduate standing.

475. Econometrics/(3).S.

Identification, measurement, and interpretation of demand, production, cost, and consumption relationships. Simple and multiple regression will be applied to time series and cross sectional data. Prerequisite: Econ. 375-376, or equivalent.

481. Seminar/(3). On demand.

An extended investigation of some specific topic with a view to giving training of research and studying intensively some subject in the field of economics. Prerequisite: Econ. 201-202-203.

Graduate Courses

502. Economic Problems of Developing Countries/(3).S.

An analysis of the economic problems of current importance in developing nations. Prerequisite: Econ. 201-202-203.

516. Economic Analysis/(3).F.

An examination of the actual operations of the American economy and an analysis of the findings in terms of economic theory. (By permission only.)

518. Monetary Theory/(3).S.

The development of theories of money and

its value. Controversy over the quantity theory. The role of interest rates. Policy implications. Prerequisite: Econ. 307.

520. Advanced Micro-Theory/(3).W.

A rigorous treatment of the theory of consumer behavior and the theory of the firm under alternative competitive conditions. Prerequisite: Econ. 310-311.

**548. Independent Study/(1-6).
F;W;S;SS.**

**551, 552. History of Economic
Thought/(3,3).F;W.**

Origin, development, and meaning of current conflicts in economic theory. A study of merchantist, classical, neoclassical, and Keynesian economics. Prerequisite: Econ. 201-202-203.

556. Linear Programming and Input-Output Analysis/(3).W.

An examination of linear programming and input-output analysis, with applications in economics and business. Prerequisite: Econ. 302, 310-311.

Department of Chemistry

George B. Miles, Chairman

The objectives of the Department of Chemistry are:

1. To prepare students to teach chemistry at the high school and junior college levels.
2. To prepare students for continuing their study of chemistry at the graduate level.
3. To prepare chemistry graduates for careers in industry and scientific research.
4. To provide supporting and/or enriching courses in other areas.

In the Master of Arts degree in the junior college teaching program, a major in chemistry consists of a minimum of 45 quarter hours of credit. The 45 quarter hours credit includes a thesis for 6 hours credit (Chemistry 550). A minimum of 6 quarter hours credit is required in education and psychology (12 quarter hours credit required for secondary certification). The following chemistry courses are required: 450 or equivalent, 460, 502 (to be taken fall term of first year), 504, 506, 510, 513 or 514, and 550.

In the Master of Science degree program, a major in chemistry consists of 45 quarter hours of courses including 6 quarter hours credit for research and thesis (Chemistry 550). The following chemistry courses are required of all candidates for this degree: 450 or equivalent, 504, 506, 510, 513 or 514, 530 and 550. The remaining quarter hours, for a total of 45 quarter hours, will be elected from courses in chemistry numbered 450 and above, Physics 453 and Mathematics 461 and 462.

All graduates students are required to participate in weekly seminar discussion periods each quarter in residence.

All master's degree candidates must pass comprehensive examinations in the four major fields of chemistry: inorganic, organic, analytical, and physical. Each must present and defend his thesis before the chemistry faculty.

Courses of Instruction in Chemistry

450. Qualitative Organic Analysis/ (4).F.

A systematic procedure for the identification of organic compounds. Laboratory practice in identifying pure organic compounds and mixtures. Prerequisite: Chemistry 201-202-203. Lecture two hours, laboratory six hours.

452. Instrumental Methods of Analysis/(4).F.

A study of some of the modern instrumental methods of analysis, including electrochemistry, spectrophotometry, magnetic resonance spectroscopy, and mass spectrometry. Prerequisite: Chemistry 210. Lecture three hours, laboratory three hours.

453. X-ray Analysis of Crystal Structure/(4).S.

Introduction to the theory of space groups and x-ray diffraction by crystalline solids.

Laboratory work in the application of principles. Prerequisite: Analytical Geometry, Differential and Integral Calculus, Physics 150-151, 152. Lecture three hours, laboratory three hours.

454-455. Biochemistry/(4-4).W-S.

Properties and metabolism of carbohydrates, lipids and proteins; chemistry of body fluids; biologically active compounds. Prerequisite: Chemistry 201-202-203. Lecture three hours, laboratory three hours.

457. Laboratory Preparations/(1). F,W,S.

Three hours of laboratory.

460. History of Chemistry/(3).S.

A study of the development of chemistry as a science with emphasis on the development of basic concepts, ideas and theories. Lecture three hours. Prerequisite: a year of General Chemistry.

Graduate Courses

502. Chemical Literature/(1).F.

To be taken fall term of first year. Lecture one hour. *Staff*.

504. Chemical Bond Theories/(3).

F. *Sink*.

506-507. Organic Reaction Mechanisms/(3-3).F-W. *Soeder, Miles*.

510. Chemical Thermodynamics/(3).W. *Johnson*.

511. Quantum Chemistry/(3).W.

Prerequisite: Chemistry 301-302-303. *Johnson*.

513. Optical Methods of Chemical Analysis/(4).W.

Prerequisite: Chemistry 452. Lecture three hours, laboratory three hours. *Olander*.

514. Electrical Methods of Chemical Analysis/(4).S.

Prerequisite: Chemistry 452. Lecture three hours, laboratory three hours. *Olander*.

520. Chemical Kinetics/(3 or 4).F.

Lecture three hours, laboratory three hours (optional). *Johnson*.

530. Advanced Inorganic Chemistry/(3).S. *Bowkley*.

540. Selected Topics/(1-6). On demand.

548. Independent Study/(1-6). F;W;S;SS. *Staff*^g.

550. Master's Thesis/(6).F;W;S;SS. *Staff*.

Department of Childhood Education

Grace G. Lilly, Chairman

The Department of Childhood Education offers undergraduate and graduate courses leading to degrees in early and late childhood education and in special education. Through its programs of classroom instruction, direct experiences, and advising, the department prepares students for certification in the various curriculum areas and grade levels in elementary schools. In addition to meeting the minimal requirements for certification, the department maintains programs of instruction, research, and field services for the continuous improvement of curriculum development, educational materials, and methods of teaching.

The Department of Childhood Education offers graduate courses leading to master's and specialist's degrees in early and late childhood. The master's degree candidates selecting a nonthesis program must complete 54 quarter hours of graduate work. At least 18 of these hours must be in one subject matter field for the intermediate certificate and 9 of the 18 must be in one field for those majoring in the early childhood education area.

Those candidates working on the specialist's degree in early and late childhood must complete 45 quarter hours of graduate credit beyond the master's degree. This program will include 21 quarter hours in professional education, a minimum of 15 quarter hours in one or more subject matter fields for the early childhood certificate, and a minimum of 18 quarter hours in one field for the intermediate certificate. When two fields are involved (4-9 certificate) there should be approximately 27 quarter hours with about an equal amount in each field.

Courses of Instruction in Childhood Education

450. Science in the Elementary School/(3).SS;Ex.

(Same as General Science 450.)

455. Experimental Approaches to the Education of the Mentally Retarded/(3).W;S.

459. Nursery—Kindergarten Curriculum/(3).F.

Development and organization of the curriculum with emphasis placed on such areas as communicative skills, science, and social learnings.

460. Psychology of Disability/(3).S.

(Same as Psychology 460.)

461. Nursery—Kindergarten Instruction/(3).W.

Selecting, planning, and utilizing the materials, methods, activities, and facilities for programs suited to the young child. Laboratory experiences required.

462. Seminar in Early Childhood Education/(3).F;W;S;SS.

An examination of contemporary approaches to the understanding, assessment, and education of preschool children.

467. Emotionally Handicapped Child/(3).F;SS.

An introductory course in the education of the emotionally handicapped child. Empha-

sis will be placed upon the psychological, sociological, and educational implications in the education of emotionally handicapped children.

473. Psychological and Sociologi- cal Problems of Exceptional Children/(3).S.

Deals with cultural, social, and intellectual adjustives and educational factors which are relevant to the understanding of etiological and therapeutic problems and issues in special education.

474. Methods and Materials for Exceptional Children/(3).W.

An intensive study and demonstration course dealing with the interpretation, design, development, and implementation of methods and materials which are used in special education.

475. Contingency Management in the Classroom/(3-6).F;SS.

An intensive study of the background, procedures, and application of contingency management in a learning situation for the exceptional child. It moves from theory and the laboratory into the classroom, home, and community.

480. Introduction to Learning Disabilities/(3).F;S;SS.

The identification and education of youth with learning disabilities.

Graduate Courses

501. Seminar in Mental Retardation/(3).F;S;SS.

An advanced course dealing with the psychological, sociological, educational, and medical aspects of mental retardation.

503. Instructional Strategies in Learning Disabilities/(3).W;SS.

Course designed to train teachers to be effective in structuring and learning situations and to develop a sequence and remedial activities and materials. Application of appropriate remedial techniques to individual deficiencies or disorders.

504. Advanced Curriculum for Exceptional Children/(3).W;SS.

A graduate level course to become knowledgeable about the physiological and psychological bases of learning. Curricular development for various exceptionalities and the rationale and development to meet their needs.

505. Seminar in Diagnostic-Prescriptive Teaching/(6).F;W;SS.

Rationale, operational models, techniques used on the implementation of the diagnostic-prescriptive approach. Supervised field experiences in the actual diagnostic-prescriptive approach will be integral portion of the course. Prerequisite: CR 472.

509. Reading and the Mentally Retarded/(3).S.

A study of the techniques in teaching reading to the mentally retarded. For special education teachers only. *Staff.*

513. Teaching the Language Arts/(3).SS.

The course deals with problems in oral and written communications in the elementary school. *Lilly.*

521. Vocational Planning for the Handicapped/(3).SS.

Vocational planning and work preparation for the handicapped. Includes consideration of basic occupational skills, work training, and sheltered workshop programs. *Staff.*

526. Educational and Behavioral Aspects of the Emotionally Disturbed Child/(3).F;SS.

A comprehensive study of the causative factors in emotional disturbance and techniques of behavior modification in the treatment of emotionally handicapped children. (Student cannot receive credit for both CE 526 and Psychology 512.) *Brooks.*

527. Organization and Administration of Special Education/(3).S.

The implementation of special education programs at the national, state, and local levels. Effective public school programming. *Winford.*

530. Education of Gifted/(3).SS.

A survey of educational programs for the gifted including curriculum, methods, and administrative educational adjustments. *Staff.*

532. Evaluation of Exceptional Children/(3).F.

(Same as Psychology 532.)

539. The Middle School Curriculum (Grades 6-9)/(3).SS.

A study of the design of an adequate and effective curriculum for early adolescents. *Robinson.*

546. Elementary School Curriculum/(3).SS.

A study of the elementary school curriculum in modern schools; recent trends in curriculum revision and organization. *Robinson.*

**548. Independent Study/(1-6).
F;W;S;SS.**

**550. Master of Arts Thesis/(6).
F;W;S. Staff.**

**565. Selected Topics/(3 or
6).F;W;S;SS.**

Subject matter may vary from term to term depending on student interest and need. A student may enroll more than once in a selected topics course provided that the content does not duplicate that of the previous course. Limit of 6 hours credit. *Staff.*

**570. Readings and Research in
Special Education/(3).SS.**

Individual programs of reading or research for students majoring in the education of exceptional children. *Winford.*

**572. Internship in Special
Education/(9-15).F;W;S.**

Supervised experience with handicapped children. *Winford.*

**613. Language Development/(3).
F;SS.**

The normative aspects of speech and language acquisition, application of linguistics and learning theory concepts; communication in lower animals; language and cognition. *Lilly.*

**614. Independent Work in Elementary
Education/(3-6).F;W;S;SS.**

Study, analysis, and evaluation of school-room procedures used in a school or schools with a view to giving experiences in reconstructing educational programs of the elementary school. *Staff.*

**615. Advanced Seminar in Elementary
Education/(3-6).F;W;S;SS.**

Consideration of group and individual investigations in elementary education. *Staff.*

**616. Field Study in Curriculum
Problems/(3-6).F;W;S;SS.**

This is to assist students in developing a conceptual framework based on general system theory for guiding, developing, and evaluating elementary school curriculum improvement. *Staff.*

**631. Analysis of the Teaching
Process/(3).S;SS.**

Examination of the teacher-pupil and pupil-pupil interaction in the classroom through study of original relevant research in disciplines concerning human behavior and society. Special attention is given to the efforts of teacher approaches to children, the organization of curriculum materials, and the structure of the classroom society on the accomplishment of educational objectives. *Staff.*

**636. A Survey of Research in
Child Development and Its
Implication for Teaching/(3).
W;SS.**

The physiological, sociological, and psychological bases of human behavior with emphasis upon research dealing with the normal school child in his environment. *Staff.*

**646. Issues, Trends, and Problems
in Elementary Education/(3).
F;SS.**

Analyses of current practices, problems, and trends in elementary education with emphasis in improved programs. *Staff.*

**647. Continuous Progress and
Nongraded Elementary
Schools/(3).W;SS.**

A study of materials, techniques, and processes of individualizing instruction in the elementary schools. *Robinson.*

**648. Independent Study/(3-6).
F;W;S;SS.**

Department of Counselor Education and Reading

Lester L. Van Gilder, Chairman

The Department of Counselor Education and Reading is responsible for organizing and providing instructional programs in counselor education, reading, and educational research. The department is responsible also for advisory and administrative functions essential to the effectiveness of the programs.

There are two programs in counselor education at the graduate level: one is designed to meet certification requirements and to prepare students primarily for work in elementary and secondary schools; the other program admits persons without an A certificate who prefer counseling in a community/junior college setting, employment and rehabilitation counseling, mental health center and pastoral counseling.

The reading program is designed to meet the requirements for a second academic concentration for education majors at the undergraduate level and for graduate certification on the master's level.

The department is also responsible for the coordination of the educational research course offered by the College of Education.

For graduate degree plans, see pages, 59-70.

Courses of Instruction in Counselor Education and Reading

456. Measurement and Assessment/(3).F;W;S;SS.

Basic course for elementary, secondary, and junior college teachers which stresses the construction and use of teacher-made tests.

460. Educational Statistics/(3). F;S;SS.

A study of the statistical procedures in education.

463. Reading in the Content Areas/(3).W;SS.

For elementary and high school.

464. Workshop in Teaching Reading/(3).SS;Ex.

465. Linguistics and Reading/(3).S;SS.

472. Diagnostic and Remedial Reading I/(3-6).F;W;S.

For the classroom teacher. How to locate causes of reading difficulties and prescribe corrective procedures. Prerequisites: CE 401 or 402 or SE 462.

473. Diagnostic and Remedial Reading II/(3).F;W;S.

Students are assigned to individual or small groups for diagnostic and remedial teaching. Prerequisite: CR 472.

477. Psychological Bases of Reading/(3).F;SS.

This course is designed to pursue in depth

the psychological basis of reading and the reading act, motivation and learning.

478. Theory and Practice of Guidance/(3).F;W;S;SS.

An introductory study of public school guidance and counseling programs and practices, including purposes, philosophy, organization, and other important aspects of a guidance program.

479. Group Methods and Processes/(3).F;W;S;SS.

A study of group dynamics, experimentation in groups, leadership roles, applicability to other settings.

484. Human Relations and Interaction/(3).F;W;S;SS.

A course designed as an elective for prospective elementary and secondary teachers, business majors, media specialists, recreation leaders, and others, whose interests lie in applying the most constructive methods of human relations known. The course will include a review of mental health innovations, self concept research, the Carkhuff-Truax scales of growth facilitation, and other learning models, creativity, and psychodynamics of the teaching-learning process.

487. [540] Guidance Services in the Elementary School/(3).F;SS.

Designed primarily for those who are preparing to become counselors at the elementary school. Emphasis is given to philosophy, organization, maintenance and use of records, variety and use of tests, play therapy concepts, consultation with teachers and/or parents.

489. Reading and Communications/(3).On demand.

Graduate Courses

500. Research in Education/(3).F;W;S.

A study of the various types of research and the logical organization of research and reporting; required in first quarter for persons working for Master of Arts degree in any area in education, industrial arts, library science. *Staff.*

508. Clinical Problems in Reading/(3-6).W;SS.

Deals with clinical techniques used in the diagnosing and treatment of reading problem. Prerequisite: CR 472, majors. *Farris.*

511. Investigations in Reading/(3).F;SS.

Investigations are made of the literature and research dealing with the teaching of reading. *Price, Jones.*

514. Psychological and Educational Testing/(3).F;W;S;SS.

A study of the rationale which underlies group testing with emphasis upon the Standards for Educational and Psychological Tests and Manuals. Prerequisite: CR 460 or permission of the instructor. (Also Psychology 514.) *Staff.*

520. Occupational and Educational Information/(3).F;S;SS.

Designed to acquaint teachers and counselors with sources and uses of vocational and educational information. *Robinson.*

522. Counseling Theory and Techniques/(3).W;S;SS.

Designed primarily for students certifying in guidance and counseling emphasis on the-

ory and practice. Prerequisites: CR 478, Psychology 450. *Harrill.*

523. Organization and Administration of Guidance Services/(3).On demand.

Primarily designed for those who desire to study the methods of introducing and establishing a school guidance program. *Robinson.*

524. Seminar in Guidance/(3). F;W;SS.

Each individual will select some phase of guidance work, according to his special interests, for research and study. Prerequisite: Approval of instructor. *Staff.*

527. Marital Counseling and Enrichment/(3).F;SS.

An emphasis upon the family as a unit of society which communicates, interacts, and experiences conflicts. A study of most recent theory, research, and practice of effective types of family communication, interaction, and resolutions to conflict. Prerequisite: CR 522.

538. Supervised Practicum in Counseling/(3-6). F;W;S;SS.

Practice in the application of counseling techniques. Available primarily for Appalachian State University counseling degree candidates. Credit and setting to be decided upon in consultation with practicum supervisor. Prerequisite: Approval of advisor. Six quarter hours—two separate quarters—are required by Appalachian State University for the certification program. Three quarter hours for noncertificate program. *Staff.*

541. Student Personnel Services/(3).W;SS.

This course is designed for students interested in preparing themselves for college

work in a noninstructional capacity. Emphasis is given to philosophy, organization, staffing, and services which comprise adequate student personnel programs: orientation, records, counseling, testing, health, recreation, housing, and placement. *Padgett.*

548. Independent Study/(1-6). F;W;S;SS.

550. Master of Arts Thesis/(6).F;W;S;SS.

551. Field Experience in Teaching Reading/(3 to 9).F;W;S;SS.

Students register only by permission. *Price.*

557. Reading Curriculum: Organization and Supervision for Reading Majors/(3).On demand and SS.

Students in this course will study reading curriculum designs and design a "curriculum" in reading and study ways and means of implementing and supervising reading programs. Prerequisite: Must have 24 hours in reading or permission of advisor in reading. *Price, Farris.*

558. Teaching of Reading/(3).S;SS.

A study of current practices, materials, and philosophy of teaching reading on all levels. *Price.*

559. Advanced Course in Methods and Materials in Reading/(3).On demand and SS.

Students will learn techniques of designing, making, and utilizing instructional materials for specific teaching purposes and methods. Prerequisite: 18 hours in reading and/or permission of graduate advisor in reading. *Staff.*

561. Evaluation and Assessment in Reading/(3).SS.

A study and evaluation of select curricula and programs in reading and the planning of a total school reading program. Open only to students specializing in reading or by permission. *Farris.*

565. Selected Topics/(3 or 6). F;W;S;SS.

Subject matter may vary from term to term depending on student interest and need. A student may enroll more than once in a selected topics course provided that the content does not duplicate that of the previous course. Limit of 6 hours credit. *Staff.*

567. Current Literature in Reading/(3).On demand and SS.

This course will involve both intensive and extensive reading of current periodicals and journals dealing with materials, methods, and theory of current trends and practices in reading. Prerequisites: 18 hours in reading, teaching experience, approval of reading advisor. *Price, Dedmond.*

568. Research Problems in Reading/(3).F;SS.

In this course students will do research on critical areas of reading. Prerequisite: Open only to reading majors who have 18 hours in reading. *Jones, Price, Farris.*

571. Seminar in Reading/(3).F.

The seminar is planned to meet the needs of specific groups in reading. Students can register only by permission. *Price.*

580. Internship in Student Personnel/(3).F;W;S.

Open only to majors in Counselor Education with prior written permission from the Director of Counselor Education. On-the-job experience will be emphasized, exposing each enrollee to at least two different student personnel services. On occasion,

the course may be repeated for 3 additional hours credit when student is assigned to a new work location. Prerequisite: CR 541.

587. Statistical Applications in Education/(3).W;SS.

Statistical methods and analysis as applied to education. A study of measures of reliability, variability, correlation, central tendency, and problems of sampling. *Staff.*

600. Seminar in Research Design/(3-6).S.

The application of research techniques in the investigation of educational problems. This course is of particular value in the definition and design of the research required for advanced graduate degrees. *Staff.*

610. Clinical Practicum III, Interdisciplinary (3-9).On demand.

A practicum in which the student works in an interdisciplinary situation and approach to solving severe (clinical) reading problems. *Farris.*

648. Independent Study/(3-6). F;W;S;SS.

661. Problems in Organization and Supervision in Reading/(3). On demand.

A study of problems in organization and supervision of reading; their causes and some probable solutions. *Price.*

670. Individual Behavior/(3).F;SS.

A survey of the literature pertaining to the perceptual approach to the study of the individual's behavior. Efforts will be made to show the applications of this approach to education and counseling. *Staff.*

671. Human Sexuality/(3).F;S;SS.

Classical and contemporary theories of sexual identity and behavior, family planning, reproduction, emotionality, intimacy, and

values are studied. Special attention is given to the work of Kinsey, Hooker, and Masters and Johnson. *Harrill.*

**672. Advanced Group Methods
and Processes/(3).W;S;SS.**

An intensive concentration of the theoretical writings and research findings relevant to various kinds of group processes. Particular attention will be given to the applicability of these processes to the promotion of democratic procedures, of the development of individuality and leadership qualities via meaningful group interaction. *Staff.*

**673. Advanced Seminar in
Reading(3-6).On demand.**

A seminar built around reading-related experiences the student faced in his field work as well as other current reading-related topics. *Jones.*

**679. Practicum in Group Methods
and Processes/(3).S;SS.**

Actual practice under supervision in group member and group leadership participation. *Staff.*

Department of Educational Media

Doris W. Cox, Chairman

The Department of Educational Media offers programs of study at the undergraduate and graduate levels which serve the needs of students to become media specialists for professional service in school library/media centers and community college learning resource centers and specialists in audiovisual technology in other agencies.

Graduate programs leading to the Master of Arts and the Specialist in Education degrees. A student desiring to pursue one of these programs should consult with the chairman and/or faculty advisor.

For graduate degree plans, see pages, 59-70.

Courses of Instruction in Educational Media

**451. Literature of the
Humanities/(3).F;SS.**

A survey of special reference works, bibliographies, and landmark books in the areas of literature, philosophy, and religion.

**452. Literature of the Social Sci-
ences and the Fine Arts/(3).W;SS.**

A survey of special reference works, bibliographies, and landmark books in the areas of biography, history, travel, the social sciences, and the fine arts.

**453. Literature of Science and
Technology/(3).W;SS.**

A survey of special reference works, bibliographies, and landmark books in the pure and applied sciences.

**454. Literature for Young
Adults/(3).W;S;SS.**

Discussion and evaluation of contemporary literature, both adolescent and adult, available for young adults. Emphasis on fiction, drama, poetry, and essays.

**455. Interpreting Books to
Readers/(3).F;S.**

Storytelling, annotations, book reviewing, the book talk, radio, television, story recordings, reading aloud, book discussions.

**456. Critical History of Children's
Literature/(3).F;SS.**

A survey of the origins and development of literature for children in England and America from Anglo-Saxon times to the present. Critical analysis of what has endured and why.

**457. Library Workshop/(3-9).
SS.**

**466. Instructional Materials/(3).
F;W;S;SS.**

Considers the process of using a wide variety of teaching and learning resources in improving instruction. Emphasizes the location, selection, and evaluation of materials; the role of instructional materials in teaching and learning; preparation and administration of instructional materials.

**467. Correlating Curriculum and
the Media Center/(3).F;SS.**

Planned to help the classroom teacher understand better the function and use of the school media center as a means of vitalizing teaching. Not open to library science majors.

**470. Organization and Administra-
tion of the School Media
Center/(6).F;W;S;SS.**

Acquisition, processing, circulation of media; personnel; records and reports; attendance and scheduling; quarters and equipment; professional relationships, evaluation of services.

**473. Cataloging and Classification
for Media Centers/(3).F;W;SS.**

Study of the principles of cataloging and classification of learning resources. Preparation of a practice file and manual.

474. Photography/(3).W;SS.

Basic theory, principles and techniques of black and white, and color picture photography.

**475. Audiovisual Instruction/(3).
F;W;S;SS.**

An introductory study of a variety of major audiovisual media which encompasses the selection and practical classroom application of materials; laboratory experience in the operation of equipment; and the production of basic visual materials.

476. Cinematography/(3).S;SS.

Basic theory, principles and techniques of motion picture photography.

**477. Children's Literature
Workshop/(3).SS.**

Graduate Courses

**500. Research Methods in
Librarianship/(3).On demand.**

A survey of scientific methods of research with application to specific problems in librarianship. *Cox.*

**502. Administration and Supervi-
sion of School Media Center
Systems/(3).On demand.**

Designed for the experienced school librarian in preparation for supervisory positions in large units of school media service. Involves a critical study and analysis of problems in organization and administration of

city, county and state school media systems.
Cox.

**503. Reading Interests and
Guidance/(3).S;SS.**

Implications of research in reading interests of children and young people. Methods and materials for guidance in their use. Open to nonmajors. *Cox.*

**504. Advanced Reference and
Bibliography/(3).W;SS.**

Special reference problems, methods and materials for the large school media center and the two-year college learning resource center. Includes cooperative aspects of media service, the development of national and international bibliography, and the implications of automation in libraries. *Staff.*

**505. Advanced Cataloging and
Classification/(3).S;SS.**

Specialized cataloging and classification problems and processes. *Staff.*

506. History of Libraries/(3).F;SS.

The development of the library as a cultural institution in ancient, medieval and modern times. *Justice.*

**507. History of Books and
Printing/(3).S;SS.**

The development of books and other records from ancient times to the present. Includes the history of writing materials, the alphabet, manuscripts, printing, illustrating, and modern book production. *Justice.*

**508. Contemporary Libraries and
Communities/(3).F;SS.**

Service goals of school, public, academic, and special libraries with emphasis on the communities they represent. Surveys, networks, public relations, and cooperative planning. *Staff.*

**510. Administration and Organiza-
tion of the Two-Year College
Learning Resource Center/(3).
F;SS.**

Professional management of personnel, budgeting, programs, facilities, and collections. Leadership factors in developing dynamic services. *Staff.*

**511. Government Publications/(3).
On demand.**

The nature and scope of United States government publications, with some attention given also to state, municipal, foreign, and international publications. Problems in their acquisition, organization, and use. *Justice.*

**512. Use of Materials with
Students and Teachers/(3).F;SS.**

Materials and methods for more effective use of library resources in various curriculum areas in the school. *Cox.*

**513. Problems and Trends in
Libraries/(3).S;SS.**

An advanced course to consider recent developments in curriculum, teaching techniques, physical facilities, and innovations in library service that affect the library. *Cox.*

**514. Film Guidance and
Interpretation for Teachers and
Librarians/(3).W;SS.**

The study of films as an art form as it applies to the responsibilities of teachers and media specialists in selecting and teaching appreciation of them. *Staff.*

**515. Critical Analysis of
Contemporary Children's
Literature/(3).S;SS.**

An in-depth study of selected works representative of the literary genres of children's literature published since 1950. *Staff.*

**528. Production and Care of
Audiovisual Materials/(3).F;SS.**

Includes design and use of graphic and photographic production techniques. Prerequisite: EM 475. *Pritchett.*

**532. Use and Care of Machines
and Equipment/(3).W;SS.**

A study of operating techniques of projection and audio devices, cameras, electronic laboratories, teaching machines; preventive maintenance and minor repairs. Prerequisite: EM 475. *Pritchett.*

**536. Programmed Instruction/(3).
S;SS.**

An introductory course in the design, preparation, and validation of programs for instruction; provides laboratory experiences in programmed learning. *McFarland.*

**537. Organization and Administration of an Audiovisual Program/
(3).S;SS.**

Selection and evaluation of materials and equipment, including an analysis of the adequacy and effectiveness of audiovisual programs in school and college systems. Prerequisite: EM 475. *Pritchett.*

540. Seminar/(3-9).F;W;S.

**541. Information Science and
Computer Applications in Media
Centers/(3).S;SS.**

Fundamental concepts of computer approaches to media functions in acquisitions, inventory control, statistics, and management analysis. Data banks and information systems, facsimile transmission, microform technologies.

545. Practicum/(3).F;W;S.

**547. Library Science Institute/(9).
SS.**

**548. Independent Study/(1-6).
F;W;S;SS.**

**550. Master of Arts Thesis/(6).
F;W;S;SS.**

**554. Television in Instruction/(3).
W;SS.**

Techniques of using television as a teaching device. Covers production and utilization with emphasis on the use of portable videotape recorder. Survey of programming available to schools from all sources. *Stoddard.*

**555. Seminar in Problems in
Audiovisual Instruction/(3).
S;SS.**

For audiovisual majors only. *Pritchett.*

**556. Practicum in Audiovisual
Programs/(3).F;W;S;SS.**

Prerequisite: Completion of all other audiovisual courses and approval of instructor. *McFarland.*

**564. Advanced Production of
Audiovisual Materials/(3).W;SS.**

Continuation of 528 in breadth and depth. Emphasis on project productions for mass distribution. Prerequisite: EM 475 and 528. *Pritchett.*

**565. Selected Topics/(3 or 6).
F;W;S;SS.**

Subject matter may vary from term to term depending on student interest and need. A student may enroll more than once in a se-

lected topics course provided that the content does not duplicate that of the previous course. Limit of 6 hours credit. *Staff.*

582. Organization and Administration of Learning Laboratories/(3).SS.

This course is designed to acquaint teachers and administrators with the unique nature of learning laboratories. Particular emphasis will be given to organization and administration of learning laboratories and programmed materials centers in community colleges. *Staff.*

592. Communications Theory and Media/(3).F;SS.

Examination of communication models and learning theory in the communication and learning processes. Special emphasis on the influences of educational communications in instructional leadership situations. *Staff.*

593. Instructional Graphics/(3).W;SS.

Basic design principles and concepts as they apply to selection, preparation, and evaluation of graphic material. Course includes laboratory experience in layout, mechanical lettering, coloring, transparency production, and graphic duplicating processes. *McFarland.*

594. Theory and Design of Instructional Graphics for Visual Literacy/(3).S;SS.

Perception and learning theory as they relate to message design; basic design principles,

laboratory experiences in high contrast photography and picture editing. *McFarland.*

604. Readings and Research in Children's Literature/(3).S;SS.

An in-depth study of literature for children, kindergarten through grade eight. Review of research studies relating to interests at different ages, discussion of types and use of various literature, folklore, modern fairy tales, myths and legends, realistic stories, biographies, and poetry to meet the needs of the individual child. *Cox.*

648. Independent Study/(3-6).F;W;S;SS.

655. Advanced Seminar in Educational Communications/(3).S;SS.

Individual and group study of selected problems. Prerequisite: Basic courses in the field. For educational media majors only. *Staff.*

656. Instructional Systems Design/(3).W;SS.

Theory and design of instructional systems. Includes cybernetics, noncomputerized program development, task analysis, behavioral objectives. Designing and arranging the learning environment. For educational media majors. *McFarland.*

Department of English

Loyd H. Hilton, Chairman

Three programs are offered leading to the Master of Arts degree in English. Two are in teacher preparation—the junior college program and the secondary school program—and require certain courses in education. The third program, the academic, is composed of courses in English alone or with an optional minor in a related field other than education.

For the Master of Arts degree for the junior college program and the secondary school program, a minimum of 36 quarter hours (33 including a thesis) of English must be offered, including English 500, Bibliography and Research, and a program of electives to be chosen by the student in consultation with his graduate advisor in English. In addition, for the junior college program, 6 hours of education are required, and for the secondary school program, 12 hours of education are required.

For the academic Master of Arts degree, a minimum of 45 quarter hours of graduate credit must be offered. These may include a minor of up to 9 quarter hours in a related discipline. They also will include 6 quarter hours credit for the thesis, which is required, and 3 quarter hours credit for English 500, Bibliography and Research, which is also required. In consultation with his graduate advisor in English, the student should plan for a minimum of 27 quarter hours of electives in English. In addition to course work, each candidate will demonstrate proficiency in reading a foreign language. For requirements concerning the final comprehensive examination for the master's degree, see the discussion of these in the Graduate Catalog or consult the chairman of the department.

Courses of Instruction in English

**459. Seminar in World Literature/
(3).F;S.**

**461. Seminar in Modern English
Grammar/(3).F;S.**

An examination of the structure of the English language, with particular emphasis on modern theories of syntax.

**466. Seminar in the History of the
English Language/(3).F;W;S.**

**467. Seminar in Introductory Lin-
guistics/(3).W.**

An introduction to the historical and theoretical aspects of language study, with particular emphasis on phonology.

**472. Seminar in the Short Story/
(3).W;S.**

473. Seminar in the Novel/(3).F;W.

474. Seminar in Poetry/(3).S.

475. Seminar in Drama/(3).F.

**476. Seminar in Literary Criti-
cism/(3).W.**

**477. Seminar in Early American
Literature/(3).F.**

**478. Seminar in Nineteenth Cen-
tury American Literature/(3).W.**

480. Colloquium/(1-6). On demand

An opportunity to study a special topic or combination of topics not otherwise provided for in the English curriculum. May be repeated for credit when content does not duplicate. Prerequisite: Upper-division status or departmental permission.

**482. Seminar in Early English Lit-
erature/(3).S.**

**483. Seminar in Elizabethan
Literature I/(3).F.**

Emphasis on Shakespeare's earlier plays.

484. Seminar in Elizabethan Literature II/(3).W.

Emphasis on Shakespeare's later plays.

485. Seminar in Seventeenth Century English Literature/(3).S.

488. Seminar in the Literature of the Victorian Period/(3).W.

Graduate Courses

500. Bibliography and Research/(3).F;SS.

A study of bibliographical problems, types of research organization and reporting of research. Required in the first quarter of beginning graduate students.

**548. Independent Study/(1-6).
F;W;S;SS.**

**550. Master of Arts Thesis/(6).
F;W;S;SS.**

557. Seminar in Masters of English Literature/(3).F.

Variable content. May be repeated once for credit when content does not duplicate. Emphasis will be indicated in term schedules.

558. Seminar in Masters of American Literature/(3).W.

Variable content. May be repeated once for credit when content does not duplicate. Emphasis will be indicated in term schedules.

559. Seminar in Masters of World Literature/(3).S.

Variable content. May be repeated once for credit when content does not duplicate. Emphasis will be indicated in term schedules.

567. Seminar in Linguistics/(3).S.

Theoretical and procedural studies in Descriptive Linguistics. Prerequisite: English 461, 467 or consent of instructor.

580. Colloquium/(1-6). On demand.

An opportunity for the graduate student to study a special topic or combination of topics not otherwise provided for in the English curriculum. May be repeated for credit when content does not duplicate. Prerequisite: Graduate status or departmental permission.

586. Seminar in Twentieth Century American Literature/(3).S.

596. Seminar in Eighteenth Century English Literature/(3).F.

597. Seminar in Literature of the Romantic Period/(3).W.

599. Seminar in Twentieth Century English Literature/(3).F.

Department of Foreign Languages

J. Roy Prince, Chairman

The objectives of the Department of Foreign Languages are to teach students to pronounce, speak, understand, read, and write the language they are studying; to give them basic knowledge of the principles of grammar and syntax of the language; to help them gather valuable and interesting information and materials about the country and peoples whose language they are studying; to introduce them to the literature in the language and help them gain an appreciation for its masterpieces; to prepare them to be better citizens of the world through

knowledge of the languages and cultures of peoples; to help them appreciate and be enthusiastic about foreign languages.

The department offers a Master of Arts degree in French and in Spanish for secondary school teachers and for junior college teachers. Prerequisite to graduate work are 36 quarter hours of language study above the elementary level. A graduate student who does not have adequate undergraduate credits may begin graduate study if at the same time he is building up his undergraduate hours to the required level. For the master's degree, a minimum of 36 quarter hours is required in the major field (French or Spanish), 6-12 in education, and 6-12 in electives. The latter may be in the major field, in another language, in education, or in another field, such as English. The only required course is Bibliography and Research, but there are several preferred electives. For further advice, consult the chairman of the Department of Foreign Languages.

The Foreign Language Laboratory

The Department of Foreign Languages has a 54 booth electronic language laboratory. In the laboratory, students listen and respond to prerecorded tapes which deal with the material covered in their courses. The main purpose of the laboratory is to increase the student's ability to pronounce, speak, and understand the language. The department believes that the laboratory increases the efficiency of language learning and that the extra hours spent in the laboratory can be the student's most productive study time.

Courses of Instruction in Foreign Languages

French

451. French Phonetics and Diction/(3).S;SS.

Offered 1974 SS.

453. History of the French Language/(3).F;SS.

Alternate years with 506. Not offered 1973-74. Offered 1973 SS.

456. Advanced Conversation/(3).F;SS.

Offered 1975 SS.

459. Linguistics and Language Analysis/(3).W;SS.

Descriptive, comparative, and structural linguistics in relation to Romance languages. On demand. Offered 1973 SS.

463. French Poetry of 16th and 17th Centuries/(3).W;SS.

Alternate years with 512. Not offered 1973-74. Offered 1975 SS.

465. Nineteenth Century Drama/(3).W;SS.

Alternate years with 522. Not offered 1973-74. Offered 1974 SS.

**467. Eighteenth Century Drama/
(3).W;SS.**

Alternate years with 518. Not offered 1973-74. Offered 1975 SS.

Graduate Courses

**500. Bibliography and Research/
(3).F;SS.**

Required of all students in the first quarter of graduate study. *Amaro* or *Prince*.

**506. French Literature to 1500/(3).
F;SS.**

Alternate years with 453. Offered 1975 SS. *Eargle*.

**508. French Drama to 1650/(3).
S;SS.**

Alternate years with 509. Offered 1973 SS. *Evans*.

**509. Classic Drama: Moliere and
Racine/(3).S;SS.**

Alternate years with 508. Not offered 1973-74. Offered 1974 SS. *Evans*.

**512. Prose Literature of 16th and
17th Centuries/(3).W;SS.**

Alternate years with 463. Offered 1974 SS. *Evans*.

**514. The French Novel Up to
1820/(3).W;SS.**

On demand. Offered 1973 SS. *Prince*.

**518. The Eighteenth Century
Philosophes/(3).W;SS.**

Alternate years with 467. Offered 1974 SS. *Prince*.

**520. Nineteenth Century Poetry/
(3).W;SS.**

On demand. Offered 1973 SS. *Powell*.

**522. Nineteenth Century Novels/
(3).W;SS.**

Alternate years with 465. Offered 1975 SS. *Powell*.

**523. Twentieth Century Novels/
(3).S;SS.**

Alternate years with 525. Not offered 1973-74. Offered 1973 SS. *Powell*.

**525. Twentieth Century Drama/(3).
S;SS.**

Alternate years with 523. Offered 1975 SS. *Powell*.

**548. Independent Study in
French/(1-6).F;W;S;SS.**

Spanish

**451. Spanish Phonetics and Dic-
tion/(3).S;SS.**

Offered 1974 SS.

**453. History of the Spanish Lan-
guage/(3).F;SS.**

Alternate years with 506. Offered 1973 SS.

**459. Linguistics and Language
Analysis/(3).W;SS.**

Descriptive, comparative, and structural linguistics in relation to Romance languages. On demand. Offered 1973 SS.

**461. The Nineteenth Century
Novel/(3).F;SS.**

Emphasis on the "Novela Realista." Alternate years with 465. Offered 1975 SS.

**465. Spanish Drama of 19th and
20th Centuries/(3).F;SS.**

Alternate years with 461. Not offered 1973-74. Offered 1975 SS.

**467. Modern Spanish-American
Poetry/(3).W;SS.**

Alternate years with 521. Offered 1974 SS.

Graduate Courses

**500. Bibliography and Research/
(3).F;SS.**

Required of all students in the first quarter of graduate study. *Amaro, Prince.*

**506. Spanish Literature to 1500/
(3).F;SS.**

Mainly "Poema de Mio Cid," "Libro de Buen Amor," and "La Celestina." Alternate years with 453. Not offered 1973-74. Offered 1975 SS. *Diaz.*

**512. The Picaresque Novel/(3).
W;SS.**

Origin and development of this genre in the 16th and 17th centuries in Spain. Alternate years with 513. Offered 1973 SS. *Amaro.*

513. Cervantes/(3).W;SS.

With emphasis on *Don Quijote*. Alternate years with 512. Not offered 1973-74. Offered 1974 SS. *Amaro, Diaz.*

**514. Drama of the Golden Age/
(3).S;SS.**

Alternate years with 516. Offered 1974 SS. *Amaro.*

**516. Poetry of the Golden Age/(3).
S;SS.**

Alternate years with 514. Not offered 1973-74. Offered 1973 SS. *Amaro.*

**520. Modern Spanish Poetry/
(3).W;SS.**

On demand. Offered 1975 SS. *Amaro.*

**521. Modern Spanish Novel/(3).
W;SS.**

Alternate years with 467. Not offered 1973-74. Offered 1975 SS. *Diaz.*

524. Colonial Literature/(3).S;SS.

Literature coming out of the period of the Spanish colonization of the New World. On demand. Offered 1974 SS. *Diaz.*

**527. Recent Spanish-American
Novels/(3).SS.**

On demand. Offered 1973 SS. *Diaz.*

**548. Independent Study in Span-
ish/(1-6).F;W;S;SS.**

Department of Geography and Geology

Fred Webb, Jr., Chairman

The department offers four programs leading to the Master of Arts degree in geography:

1. The liberal arts program, requiring 45 quarter hours, including a thesis and a reading knowledge of a modern foreign language.
2. The junior college teacher program, requiring 33 quarter hours in geography, 6 quarter hours in education, and a thesis.
3. The junior college teacher program requiring 36 quarter hours in geography, 6 quarter hours in education, 12 quarter hours of approved electives, and no thesis.
4. The secondary school teacher program which requires either 33 quarter hours with a thesis or 36 quarter hours without thesis, 12 quarter hours of education and psychology, and up to six quarter hours of electives.

Geography 500, Bibliography and Research, should be taken during the first 15 quarter hours of work.

Courses of Instruction in Geography and Geology

Regional Geography

401. Geography of the South/
(3).W.

402. Geography of North Caro-
lina/(3).F.

An examination of the interplay of the natural and cultural features of North Carolina, their spatial distribution and interrelatedness.

Graduate Courses in Regional Geography

507. Geography of Eastern United
States/(3).F. Yoder.

508. Geography of Western
United States/(3).W. Yoder.

Physical Geography

482. Geomorphology/(4).S.
(Same as Geology 482.)

Cultural Geography

420. Urban Geography/(3).S.

Approaches to urban economic, social, and political structures and problems and related geographic concepts.

421. Manufacturing Geography/
(3).F.

Evaluation of the place-to-place variation of different types of manufacturing industry, emphasizing the changes in regional structure of manufacturing and industrial location theory.

423. Political Geography/(3).S.

Spatial aspects of territoriality, boundaries, voting patterns, government programs, for-

mation of political units, political development and integration, and environmental policy.

425. Geographic Influences in American History/(3).W.

Man's reaction to and use of environmental factors as he occupied the territory of the United States.

*Graduate Courses in Cultural
Geography*

520. Urban Analysis/(3).S.

An analysis of urban centers from historical development through the contemporary city. Emphasis is placed on classification, site, situation, distribution, functions, and patterns of land use, culminating in urban problems, trends, and city planning. *Gade.*

523. Geographic Aspects of World Affairs/(3).S.

A geographic analysis of major world movements and events associating the physical environment with social, political, and racial factors. (Same as Political Science 517.) *Yoder.*

Graduate Courses in Theory, Techniques, Independent Study, and Seminars

500. Bibliography and Research/(3).F;SS. Yoder.

509. Concepts in Geography/(3).F.

Investigation and discussion of selected geographic concepts, both physical and cultural, which apply to man's utilization of earth-space. Open, with consent of instructor, to graduate nonmajors. *Reiman.*

540. Seminar/(3).S.

A specialized course involving advanced study, research, and writing by small groups

in selected areas. Students may enroll in this course more than once provided the course content is nonduplicating. *Staff.*

**548. Independent Study/(1-6).
F;W;S;SS.**

**550. Master of Arts Thesis/(6).
F;W;S;SS.**

Geology

442. Ground-water Geology/(3).W.

Distribution, principles of occurrence, and utilization of underground water. Prerequisites: Geology 101-102-103. Lecture: three hours.

450. Earth Science/(3).W;SS.

Study of the earth in space with emphasis on the solar system; the effects of weathering, erosion, and diastrophism on the lithosphere. Prerequisite: Consent of the instructor. Not open to geology majors. Lecture: three hours.

461. Introduction to Geochemistry/(4).S.

Chemical constitution of the earth, distribution of elements, and geochemical prospecting. Prerequisites: Geology 313 and Chemistry 103. Lecture: two hours; laboratory: four hours.

462. Introduction to Oceanography/(3).S.

A study of physical, chemical, biological, and geological oceanography and their interrelationships. Prerequisites: At least two of the following courses: Physics 103, Chemistry 103, Biology 103, Geology 103. Lecture: three hours.

463. Appalachian Geology/(3).S.

Study of tectonics and stratigraphy as exemplified by the central and southern Appalachian mountain system. One or more field trips required. Prerequisites: Geology 331 and Geology 341. Lecture: two hours; laboratory: three hours.

472. Economic Geology/(3).W.

Principles, processes, and distribution of major metallic and nonmetallic mineral deposits with type illustrations. Prerequisites: Geology 313, Geology 331, and Geology 341. Lecture: three hours.

473. Seminar in Earth Science/(1).

On demand.

A survey of sources and uses of materials and aids for earth science teachers. Prerequisite: Consent of instructor.

482. Geomorphology/(4).S.

Origin and recognition of landforms; descriptive and quantitative aspects supplemented by means of maps, aerial photographs, laboratory, and field study. Prerequisites: Geology 101-102-103. Lecture: three hours; laboratory: three hours.

Department of Health, Physical Education and Recreation

Lawrence E. Horine, Chairman

A major in health and physical education leading to the Master of Arts degree in secondary school teaching consists of a minimum of 36 quarter hours selected by the student in consultation with his advisor and includes Physical Education 500; Counselor Education and Reading 456; Psychology 455 or 502; Administration, Supervision and Higher Education 506; and one of Administration, Supervision and Higher Education 535 and 547. The major leading to the Master of Arts degree in junior college teaching consists of a minimum of 36 quarter hours and includes Physical Education 500; Administration, Supervision and Higher Education 542; and at least one of Administration, Supervision and Higher Education 544, 545, and 574.

Courses of Instruction in Health and Safety, Physical Education, and Recreation

Health & Safety

470. Drugs, Tobacco, and Alcohol/(3).F;S.

The harmful effects of tobacco, alcohol, and drug abuse on the human body will be studied. The course will include selection and development of resource materials and teaching methods for grades K-12. Prerequisite: Senior or Graduate standing.

480. Human Sexuality/(3).W;S;SS.

Information and concepts of sex education including physiological, social, psychological, and moral aspects of human sexuality will be studied. The course will include the selection and development of resource materials and teaching methods for grades K-12. Prerequisite: Senior/Graduate standing.

544. Workshop/(3).SS.

Physical Education and Recreation

453. Football Coaching/(3).S;SS.

Lectures and discussions on modern methods of training, play patterns, game strategy, and seasonal planning. Open to experienced coaches only.

454. Basketball Coaching/(3).S;SS.

A study of modern team and individual offense and defense. Lectures and discussions. Open to experienced coaches only.

455. Track and Field Coaching/(3).SS.

Lectures, discussions, study of training for all events. Open to experienced coaches only.

457. Advanced Modern Dance/(3).SS.

Study and analysis of the techniques and basic philosophy of the dance, choreography, composition of various schools, settings, costuming, music, and exhibitions.

458. Practicum in Outward Bound Education/(6).SS.

Through the experiences in the wilderness, the student will learn at an outward bound center skills in camping, survival, mountaineering and be trained in fitness. The goals of the course will be centered around encouraging self-awareness and personal responsibility, developing a sense of conscience and competence, stimulating awareness of nature and human relationships, and integrating all aspects of one's personal life.

465. Seminar in Individual and Dual Sports/(3).W;SS.

A study of individual and dual sports except aquatics, track and field.

466. Seminar in Team Sports/(3).F;SS.

A study of team sports except basketball and football.

490. Advanced Athletic Training/(3).F;SS.

Conditioning of athletes, advanced therapy techniques, rehabilitative exercises, professional ethics, advanced taping and bandaging, specific advanced first aid techniques used in the care of athletic injuries, and the legal aspects of athletic training. Prerequisite: PE 412 or equivalent.

Graduate Courses

500. Bibliography and Research/(3).F;SS.

A study of bibliographical problems in the field, types of research, resources, organization and reporting, documentation of graduate writing and application to term projects. *Steinbrecher, Turner.*

501. Scientific Bases of Health and Physical Education/(3).W;SS.

Current findings and theories in various disciplines and specialties and their application to health and physical education. *Larson, Meeks, Thomas.*

502. Curriculum Development in Health and Physical Education/(3).F;SS.

Study and evaluation of curriculum, program, and construction of plans for health and physical education for grades one through twelve. *Gruensfelder, Larson, Meeks.*

503. Analysis of Neuromuscular Activity/(3).S;SS.

Anatomical, physiological, psychological, and mechanical principles applied to the analysis of skills and conditioning of the human in motion. Prerequisites: Undergraduate course in anatomy, physiology, kinesiology. *Meeks, Thomas.*

504. Philosophies Related to Health and Physical Education/(3).S;SS.

A study of the outstanding leaders and ideas of the past and present as they apply to health, fitness, and recreation. *Gruensfelder, Larson, Thomas.*

505. Interpretation of Data/(3).W;SS.

Analysis and interpretation of test and measurement results and research findings in health and physical education. *Hoover, Steinbrecher.*

506. Measurement and Evaluation in Health and Physical Education/(3).S;SS.

A course on measurement, evaluation, statistics, analysis of methods, test selection, construction, and administration. *Hoover, Steinbrecher.*

507. Organization, Administration, and Supervision of Health and Physical Education/(3).W;SS.

Study and analysis of the organization, administration, and supervision of programs, trends, theories, and current practices. *Hoover, Larson, Turner.*

508. Administration of Athletics/(3).F;SS.

Analysis and comparison of various methods of operating athletics in schools and universities; schedules, contracts, purchasing, storage, travel, insurance, training problems, officials, evaluation. *Hoover, Larson.*

509. Seminar in Physical Education/(3).S;SS.

Lectures, discussions, case studies, and summary of the fields of physical education for experienced teachers. A problems course. *Gruensfelder, Horine, Meeks, Thomas, Turner.*

510. Athletic Facilities/(3).S;SS.

The planning, construction, budgeting, and maintenance of indoor and outdoor facilities for athletics, physical education, and recreation. *Turner.*

512. Seminar in Dance and Rhythmics/(3).W;SS.

For students with background and experience in dance. *E. Thomas.*

**520. International Health and
Physical Education/(3).F;SS.**

A study and comparison of health, physical education, recreation, and sport in selected foreign countries, and international organizations that control these programs. *Horine.*

**521. Physical Education for the
Retarded/(3).S;SS.**

Current programs and discoveries on the use and contribution of physical activity for increasing the potential of the mentally retarded. *Meeks.*

**522. Seminar on School Health
Problems/(3).W;S;SS.**

A problems course for experienced teachers. *Horine, Williams.*

543. Internship/(3-6).F;W;S;SS.

The internship includes the student's being placed in an educational institution, a sport

organization, or a recreational center for one quarter. Stipends may be included. The student will be exposed to all duties of the organization, will complete a comprehensive term paper based on the internship experience, and will take part in several seminars.

544. Workshop/(3).SS.

**547. Creative Physical
Education/(3).W;SS.**

The study, analysis, and demonstration of teaching physical education and health, recreation, and coaching athletics in creative and innovating techniques. Recent trends and research findings of creative techniques of teaching physical education will be presented. *Turner.*

**548. Independent Study/(1-6).
F;W;S;SS.**

**550. Master of Arts
Thesis/(6).F;W;S;SS.**

Staff.

Department of History

Roy Carroll, Chairman

The Department of History seeks: (1) to provide a basis for a liberal education through the study of mankind's past; (2) to provide background and preparation for careers in politics, law, journalism, religion, and other fields; (3) to prepare students for both teaching and continuing advanced studies in history.

For a Master of Arts degree, a graduate student should take 33-37 quarter hours of work in history, including History 512 or 524, History 500, and, if a thesis is not submitted, History 548. The department offers three programs leading to the Master of Arts degree:

1. The liberal arts program, which requires 33 quarter hours in history, including a thesis, 9 quarter hours of electives in a related field, 3 quarter hours elective in the humanities, and a reading knowledge of a foreign language.
2. The junior college teacher program, which requires 34-37 quarter hours in history, 6-12 quarter hours in a related field, and 6 quarter hours in education. The thesis is optional.
3. The secondary school teacher program, which requires 33-36 quarter hours

in history, 6 quarter hours in a related field, if a thesis is not included, 9 quarter hours in education, and 3 quarter hours in psychology. The thesis is optional.

A program of studies to meet the needs and interests of the graduate student will be determined through counseling.

Courses of Instruction in History

452. United States Cultural-Intellectual History/(4).F.

A study of American ideas and civilization as expressed in religious developments, social reform thought and movements, science, art and architecture, higher education, and American-European cultural interaction.

454. North Carolina History/(4).W.

A study of North Carolina history from its establishment as a colony to the present.

455. Selected Topics in Afro-American History/(4).W.

From slave origins to the present, with emphasis on the period since Emancipation.

462, 463. History of Central Europe/(4,4).F,W.

A survey of social, political, and intellectual developments in Central Europe: to 1871; since 1871.

472, 473. History of Russia/(4,4).F,S.

A survey of imperial Russia from the 15th century to 1917; the Russian revolution and the Soviet state since 1917.

491. Senior Honors Essay/(2).F;W;S.

Open only to seniors reading for honors in history.

Graduate Courses

500. Bibliography and Research/(3).F;SS.

A study of bibliographical problems, types of research, and organization and reporting of research. Required in the first quarter of all beginning graduate students. *Carroll, Haunton.*

501. Interpreting American History/(3).SS.

A review of American history through study of conflicting interpretations of great issues. *Dixon.*

502. Formation of the American Union/(3).F.

A study of the period 1763-1800 in American history. Emphasis is on the American Revolution, the Articles of Confederation, and the Constitution, and on varying historical interpretations of these events. *Dixon.*

504. Jacksonian Democracy/(3).S.

Political, social, and cultural changes in the United States during the second quarter of the nineteenth century and the forces which produced the changes. *Counihan.*

506. Studies in Civil War and Reconstruction/(3).S.

Drozdzowski.

507. Studies in the History of the South/(3).W.

Haunton.

**509. Studies in 20th Century
United States/(3).S.**

Antone, Fish.

**510. Studies in the U.S. Foreign
Policy/(3).W.**

Dixon, Blackburn.

**511. Studies in American Intellectual
History/(3).W.**

Drozowski.

**512. American Historiography/
(3).F.**

A study of the writing of American history from the seventeenth century to the present, with emphasis on the historical philosophies, interpretations, and careers of the major nineteenth and twentieth century historians. *Drozowski.*

**514. Studies in the English Democratic
Tradition/(3).S.**

Carroll, Hanft.

**516. Studies in 16th and 17th Century
Europe/(3).F.**

Green.

**519. Studies in 18th Century Europe/
(3).W.**

Petschauer.

**521. Studies in 19th Century Europe/
(3).F.**

Reinerman.

**522. Studies in 20th Century
Europe/(3).S.**

Reinerman.

**524. European Historiography/
(3).W.**

A study of the development of historical writing in the West from ancient Greece to the present, with some attention to methodology, primary sources, and the philosophy of history. *Carroll, Green.*

**530. Studies in 20th Century
China/(3).S.**

Wu.

540. Seminar/(3).W;S.

A specialized course involving advanced study, research, and writing by small groups in selected areas. Barring duplication, a student may enroll twice for a credit totaling 6 quarter hours. *Staff.*

**545. Seminar in Teaching of History
in College/(1).F;S.**

Required of graduate students in the junior college program. *Staff.*

**548. Independent Study/(2-6).
F;W;S;SS.**

**550. Master of Arts Thesis/(3-6).
F;W;S;SS.**

Department of Industrial Arts and Technical Education

Frank R. Steckel, Chairman

The requirements for a major in industrial arts leading to the Master of Arts degree includes 512, 514, 517, 520, and electives in industrial arts to total 36 quarter hours. The minor determines the kind of teacher certification—secondary

school teacher or junior college teacher. A minor in business administration is recommended for the Master of Arts degree in technology.

The requirements for a minor in industrial arts on the graduate level include 512, 514, 517, and electives to total 24 quarter hours.

Courses of Instruction in Industrial Arts and Technical Education

452. Contemporary Industrial Finishing/(3).On demand.

The course consists of the care and maintenance of finishing equipment; the selection and use of spray equipment and the preparation of the surface to be finished; staining, filling, undercoating, top coating as well as rubbing out the final coat; application of simple and synthetic finishes. Each student should bring a small piece of furniture, such as an end table, coffee table, or small wood object for finish. Lecture one hour, laboratory five hours.

454. Period Furniture/(3).On demand.

The study of furniture and its importance, design, and periods. The student designs and constructs a piece of period furniture. Prerequisite: 9 quarter hours of woodworking or its equivalent. Lecture one hour, laboratory five hours.

455. Contemporary Furniture/(3).On demand.

The design and construction of classic contemporary furniture and the work of contemporary furniture designers, with emphasis on Scandinavian design. Lecture one hour, laboratory five hours.

456. Communications/(3).SS.

Elements of television, radio, telemetry, and associated communications phenomena. Lecture one hour, laboratory five hours.

458. Crafts for the Handicapped/(3).S;SS.

Basic craft activities and occupational skills for the handicapped. Practical experiences in materials and methods.

459. Graphical Analysis of Drafting Problems/(3).On demand.

Techniques of presenting data for the solution of scientific and technical problems through the use of graphic computations and the direct (and indirect) methods of descriptive geometry. Prerequisite: Industrial Arts 102. Lecture one hour, laboratory five hours.

460. Industrial Design/(3).S.

Design as applied to the industrial product. Lecture one hour, laboratory five hours.

461. Industrial Illustration/(3).On demand.

Practice with the various media used in technical illustrations for reproduction and publication to acquaint the student with the steps in developing technical manuals, brochures, and similar industrial publications. Prerequisite: Industrial Arts 101, 102. Lecture one hour, laboratory five hours.

462. Materials/(3).On demand.

The structure and characteristics of common industrial materials; laboratory work in the same area of stress-strain hardness testing and the heat treatment of metals.

463. Care and Maintenance of Equipment/(3).SS.

The installation, care, and maintenance of power equipment and motors, including complete rebuilding, adjusting, and full utilization of the rebuilt machine.

**464. Problems in Leather
Techniques/(3).F;W;S;SS.**

An analysis of functional design and production methods of leather work. Individual projects designed to employ various technical and commercial methods of production. Lecture one hour, laboratory five hours.

**465. Problems in Ceramics
Techniques/(3).F;W;S;SS.**

An analysis of functional design and production methods of ceramics. Individual projects, designed to employ various technical and commercial methods of production. Lecture one hour, laboratory five hours.

**466. Problems in Art Metal
Techniques/(3).W.**

An analysis of functional design and production methods of art metal techniques. Individual projects designed to employ various technical and commercial methods of production. Lecture one hour, laboratory five hours.

**467. Problems in Jewelry
Techniques/(3).F;S.**

An analysis of functional design and production methods of jewelry. Individual projects designed to employ various technical and commercial methods of production. Lecture one hour, laboratory five hours.

**468. Transportation/(3).On
demand.**

Theory and application of internal combustion engines, turbines, and turbo jets to transportation.

**469. Machine Tool Operation/(3).
On demand.**

The cutting and shaping of metals using the common machine tools of the school of industry.

**470. Advanced Machine Tool
Operation/(3).On demand.**

Advanced laboratory practice in setting up and operation of standard and production type machine tools. Prerequisite: 6 hours of

metal. Lecture one hour, laboratory five hours.

471. General Shop/(3).F;W;S.

The combining of the various unit shops into one physical setting. Development of course materials suitable for use in the types of general shops found in the public schools. Lecture one hour, laboratory five hours.

**475. Problems and Processes of
Industrial Arts/(1-3).F;W;S.**

Individual research on problems determined by the student's need.

**480. General Shop: Graphic
Arts/(3).On demand.**

An analysis of techniques and laboratory practice in all areas of graphic arts. Areas include photo-offset lithography, letterpress printing, silk screen printing, block printing, and bookbinding. Lecture one hour, laboratory five hours.

**481. Advanced Offset Lithography/
(3).On demand.**

Advanced laboratory practice in composition, industrial photography, plate manufacturing techniques, and offset press set-up and operation. Lecture one hour, laboratory five hours.

**482. Advanced Letterpress
Printing/(3).On demand.**

Advanced laboratory practice in composition, make-ready, presswork, and finishing techniques, including special operations on the platen press and related technology. Lecture one hour, laboratory five hours.

**483. Office Reproduction Tech-
niques/(3).On demand.**

The study of the various methods modern businesses use to reproduce printed or duplicated copy. The course includes secretarial practices of cold type composition, offset lithography, electro-static printing and auxiliary operations.

Graduate Courses

504. Machine Design and Construction/(3).On demand.

The elements of machine design including the construction of a powered machine. Lecture one hour, laboratory five hours. *Rapp.*

505. Industrial Tools and Processes/(3).On demand.

A survey of the basic materials, elements, and machines of industry to develop an understanding of industrial nomenclature, methods, and processes. Lecture, demonstration, and field trips. Prerequisite: 6 hours of metal. Lecture one hour, laboratory five hours. *Rapp.*

506. Electronics Component and Systems/(3).On demand.

A laboratory course largely devoted to the construction of electronic gear. Lecture one hour, laboratory five hours. *Sloop.*

507. Industrial Electronics/(3).On demand.

This course covers, through lecture, demonstration, and experiments, control devices such as thyatrons, relays, timing devices, synchros, and motor controls. Lecture one hour, laboratory five hours. *Sloop.*

508. Digital Computer Circuits/(3).SS.

Through experimentation and demonstration, this course offers realistic practice with digital logic circuits; the application of digital computers in business; the arithmetic unit, memory elements, input-output devices, and the control element. Lecture one hour, laboratory five hours. *Sloop.*

509. Transistor Workshop/(3).SS.

An intensive course devoted to the application of transistors and involving techniques

of testing in regard to DC parameters and interpretation of transistor manufacturers' data sheets. Lecture one hour, laboratory five hours. *Steckel.*

510. Industrial Arts for Elementary School Teachers/(3).SS.

Development of basic skills through elementary work in woods, metals, and other materials easy to obtain. Adaptation of work to classroom situations. Planning for creative work with limited equipment. Not open to majors in industrial arts. Lecture one hour, laboratory five hours. *Sloop.*

512. Philosophy of Industrial Arts Education/(3).F;SS.

The philosophy of industrial education from its beginning in manual training through contemporary programs in industrial arts and vocational education. *Steckel.*

513. Industrial Arts Curriculum Development/(3).On demand.

Planning and development of course content for the major areas of industrial areas, incorporating the prevailing philosophy and objectives of school systems. *Steckel.*

514. Design and Equipping of Industrial Arts Facilities/(3).W;SS.

Factors of school shop planning, equipment selection, layout and arrangement, and architectural considerations. *Steckel.*

517. Design Method and Techniques for Industrial Arts Laboratories/(3).S;SS.

The role of the project as a vehicle for learning. Preparation of instructional materials, record keeping, budget construction, and requisitioning of supplies. *Steckel.*

520. Skill Development in Major Areas/(3-6).On demand.

Individual or group work in area competence. Technique and process in the craftsmanship of the transformation of materials.

Prerequisite: Must have been admitted to candidacy. *Staff.*

**521. Woodworking Jigs and
Fixtures/(3).On demand.**

The design and construction of jigs and fixtures for machines commonly found in industrial education shops. The use of common school shop machines for production by adapting them with jigs and fixtures and special cutters. Prerequisite: one wood and one metal class from Appalachian. Lecture one hour, laboratory five hours. *Staff.*

**522. Specialty Woodworking/
(3).On demand.**

Wood carving on flat, turned, and curved surfaces. Inlaying with synthetic and natural woods. Veneering flat and curved surfaces. Laminating with wood and veneer both flat and curved. Design of projects using the above. Lecture one hour, laboratory five hours. *Staff.*

**526. Advanced Ceramics/
(3).F;W;S;SS.**

Individual problems in the advanced phases of ceramics design, production, and finishes. Lecture one hour, laboratory five hours. *Owen.*

527. Advanced Jewelry/(3).F;S.

Individual problems in the advanced phases of jewelry design, production, and finishes. Lecture one hour, laboratory five hours. *Owen.*

**528. Advanced Leather/(3).
F;W;S;SS.**

Individual problems in the advanced phases of leather design, production, and finishes. Lecture one hour, laboratory five hours. *Owen.*

530. Special Problems in Industrial Education/(1-3).F;W;S.

Individual research. Areas to be determined by need, background, and interest. Prerequisite: Must have been admitted to candidacy. *Staff.*

**531. Photo-Offset Lithography/
(3).On demand.**

Individual problems in the advanced phases of industrial photography, film and lithographic plate preparation, cold type composition, and offset press techniques. *Banzhaf.*

**533. Letterpress Printing(3).On
demand.**

Individual problems in the advanced phases of hot-type composition, make-ready, die-cutting, finishing and letterpress techniques. *Banzhaf.*

**536. Problems in Bookbinding/
(3).On demand.**

Individual problems in the advanced phases of binding loose pages, pamphlets, magazines, and miscellaneous printed materials, with special emphasis on finishing and cover materials. *Banzhaf.*

**537. Silk Screen Printing/(3).On
demand.**

Individual problems in the advanced phases of silk screening multicolor on various media using the techniques of hand-cut, photo, and acid etching processes. *Banzhaf.*

**548. Independent Study/(1-6).
F;W;S;SS.**

**550. Master of Arts Thesis/(6).
F;W;S;SS.**

Department of Mathematical Sciences

Ray L. Graham, Chairman

Through its faculty and curriculum the Department of Mathematical Sciences provides undergraduate and graduate programs of study which are designed to complement other areas of study in the university and to prepare students to teach mathematics on the elementary, secondary, and junior college levels, to pursue graduate study in mathematics, or to begin careers as professional mathematicians in business and industry.

A student beginning a graduate program of study leading to a master's degree in mathematics must have the equivalent of an undergraduate major in mathematics. The Department of Mathematical Sciences offers graduate programs in secondary school teaching and junior college teaching as well as a general academic graduate degree program. For each program the appropriate committee in the department determines an acceptable program for each student which will include requirements as follow.

For the Master of Arts degree program in secondary school teaching:

- I. (a) (Without thesis) 36 hours of acceptable* course work in mathematics, at least 18 of which must be at the 500 level. (b) (With thesis) Including the thesis, 33 hours of mathematics course work at the graduate level, at least 18 of which must be at the 500 level.
- II. Prior to beginning course work, the candidate will meet with the Graduate Advisory Committee to design his program of study. Any subsequent changes in his program are made with the counsel and approval of this committee.
- III. The candidate must have completed an acceptable* teaching apprenticeship prior to receiving the degree.

For the Master of Arts degree program in junior college teaching:

- I. (a) (Without thesis) 54 quarter hours of graduate course work including: AH 542 (3 hours); one of the three following courses: AH 544 (3 hours), AH 545 (3 hours), AH 574 (3 hours); and 48 additional quarter hours of acceptable* course work, at least 24 quarter hours of which must be numbered 500 or above. (b) (With thesis) 45 quarter hours of graduate course work including: AH 542 (3 hours); one of the three following courses: AH 544 (3 hours), AH 545 (3 hours), AH 574 (3 hours); and 39 additional hours of acceptable* course work at least 24 hours of which must be numbered 500 or above.
- II. Prior to beginning course work, the candidate will meet with the Graduate Advisory Committee to design his program of study. Any subsequent changes in his program are made with the counsel and approval of this committee.
- III. The candidate must have completed an acceptable* teaching apprenticeship prior to receiving the degree.

* Determined by the Graduate Advisory Committee.

For the general Master of Arts program in mathematics:

- I. A thesis is required (Mathematics 550—6 hours)
- II. In addition to the thesis, 39 hours of acceptable* course work, at least 24 of which must be at the 500 level.
- III. Prior to beginning course work, the candidate will meet with the Graduate Advisory Committee to design his program of study. Any subsequent changes in this program are made with the counsel and approval of this committee.
- IV. The candidate must have completed an acceptable* teaching apprenticeship prior to receiving the degree.

Courses of Instruction in Mathematics, Computer Science, and Statistics

Mathematics

311-312. Differential Equations/ (3-3).F-W.

A study of methods of solution of ordinary differential equations. Prerequisite: Mathematics 211.

321-322. Modern Algebra/(3-3). F-W.

A study of rings, integral domains, integers, fields (rational, real, and complex), groups, and polynomials. Prerequisite: Mathematics 211 or permission of the instructor.

325. A Study of Integers/(3).W;S.

A study of the integers beginning with the Peano postulates and including the Fundamental Theorem of Arithmetic, Diophantine equations, congruences, Fermat's and Wilson's theorems, perfect numbers, Euler's theorem, Fermat's conjecture, and the Goldbach conjecture. Emphasis will be on the historical as well as the theoretical development of the subject. Prerequisite: Mathematics 321 or permission of the instructor.

331-332-333. Mathematics for Elementary Teachers/(5-5-5).F-W-S.

A study of the area of mathematics related to the modern elementary school curriculum. To be included are topics from abstract algebra, geometry, number theory, mathematical logic, trigonometry, and intuitive calculus. Not open to mathematics majors. Prerequisite: Mathematics 104.

341. History of Mathematics/(3).F.

A study of the development of mathematical thought.

348. Independent Study/(1-6). F;W;S;SS.

361-362. Introduction to Geometry/(3-3).F-W.

A study of the development of Euclidean geometry including both the synthetic and

* Determined by the Graduate Advisory Committee.

the metric approach. Topics to be considered include parallelism and similarity, measurements, ruler and compass constructions, and consideration of at least one non-Euclidean geometry. Prerequisite: Mathematics 211 or permission of the instructor.

371. Introduction to the Application of Mathematics/(3).S.

A survey of problems in the physical, engineering, biological, and management sciences in which undergraduate level mathematics is useful in the formulation and solution.

415. Introduction to Numerical Methods/(3).F.

The analysis and application of selected numerical methods for the solution of polynomial equations, systems of linear equations, and differential and integral equations. The student should have some familiarity with differential equations and computer programming.

416. Fourier Series and Boundary Value Problems/(3).W.

A study of several systems of orthogonal functions and how these systems are used to solve certain partial differential equations occurring in mathematical physics. Prerequisite: Mathematics 312.

417. Intermediate Differential Equations/(3).S.

A study of the theory of ordinary differential equations emphasizing the existence and uniqueness of solutions to certain classes of differential equations. Prerequisite: Mathematics 312.

**440. Undergraduate Seminar/(1-6).
On demand.**

(Permission to register must be given by the department chairman.)

456. Geometry for Elementary School Teachers/(3).S;SS.

An informal treatment of aspects of geometry

which are relevant to the elementary school curriculum. The topics considered include congruence, measure of segments and angles constructions, parallels and parallelograms, similarity, space geometry, areas and volumes, and measurements related to circles. Not open to mathematics majors.

459. Foundations of Arithmetic/(3).SS;Ex.

A study of the laws of arithmetic, concept of number, postulational treatment of number systems, logical reasoning. Not open to mathematics majors.

461-462. Introduction to Real Variables/(3-3).F-W.

A rigorous treatment of the concepts of sequences, series, limit, continuity, differentiation, integration, and sequences and series of functions. Prerequisite: Mathematics 321-322.

471. Elementary Group Theory/(3).F.

A study of group theory including such topics as quotient groups, permutation groups and finite Abelian groups. Prerequisite: Mathematics 321-322.

472. Elementary Ring Theory/(3).W.

A study of rings, subrings, ideals, principal ideal domains and polynomial rings. Prerequisite: Mathematics 321-322.

477-478. Introduction to Topology/(3-3).F-W.

A study of the basic concepts of general topological spaces including such topics as elementary point set topology, product spaces, metric spaces and continuous functions. Prerequisite: Mathematics 321-322.

481. Foundations of Geometry/(3).F;S.

A treatment of projective geometry including both the synthetic and the analytic ap-

proach. Also to be considered is a study of the relation to Euclidean, affine and hyperbolic geometrics to projective geometry. Prerequisite: Mathematics 362 and Mathematics 214.

Graduate Courses

501-502-503. Numerical Analysis with Computer Applications/ (3-3-3).F-W-S.

A study of numerical methods of solutions of algebraic, differential, and integral equations and methods of integration with emphasis on the analysis of errors and convergence properties. Problem solving aspects will utilize computers. The course is directed toward the students who will be teaching computer-oriented mathematics courses as well as those who may work in industry. Prerequisite: Linear algebra, real analysis, and computer programming.

511-512. Real Variables/(3-3).F-W.

A study of the Lebesgue Integral leading to the proof and applications of the Lebesgue-Radon-Nikodym theorem. Prerequisite: Mathematics 462.

513. Selected Topics in Analysis/ (3). On demand.

514. Complex Variables/(3). On demand.

An introduction to the study of complex variables to include such topics as line integrals, the Cauchy theorem, the Cauchy integral formula, Morera's theorem, and the Laurent series.

521. Galois Theory/(3).F.

A study of fields and field extensions. Prerequisite: Mathematics 471 and Mathematics 472.

522. Vector Spaces and Modules/ (3).W.

A study of rings and modules with special emphasis on the case where the ring is a field. Prerequisite: Mathematics 471 and Mathematics 472.

523. Selected Topics in Algebra/ (3). On demand.

531. Topology/(3).S.

A study of topology to include such topics as general product spaces, complete metric spaces, compactifications, embedding and metrization theorems, and quotient spaces. Prerequisite: Mathematics 478.

532. Algebraic Topology/(3).S.

A study of elementary homology and homotopy theory including applications in other areas of mathematics. Prerequisite: Mathematics 478.

533. Selected Topics in Topology/ (3). On demand.

540. Graduate Seminar/(1-6). F;W;S.

548. Independent Study in Mathematics/(1-6).F;W;S;SS.

Prerequisite: 18 hours of graduate mathematics.

550. Master of Arts Thesis/(6). F;W;S.

559. Investigations in the Teaching of Mathematics/(3).SS.

An examination of recent research and experimental programs in the teaching of secondary school mathematics.

560-561. Analysis for Teachers/(3-3).SS.

A rigorous study of elementary calculus extending to a treatment of fundamental concepts of analysis involving functions of a real variable.

563-564. Linear Algebra for Teachers/(3-3).SS.

A study of elementary concepts of linear algebra extending to a rigorous level of algebraic proof.

566. Topics in Algebra and Analysis for Teachers/(3).SS.

An extension of 561 and 564 with a treatment which investigates the unifying concepts of algebra and analysis.

Computer Science

A minor in computer science consists of 18 quarter hours and must include Computer Science 353.

251. FORTRAN Programming/(2).F;W;S;SS.

A study of FORTRAN programming language and flowcharts as applied to scientific problems. Intended for any student having a need for computer assistance. No prerequisite.

252. COBOL/(3).W.

A study of the COBOL programming language. This course aims at a basic competence in writing and running COBOL programs.

567. Computer Applications in the High School/(3).SS.

An examination of ideas fundamental to computers and data processing together with programming experience. Effects of the computer on the high school curriculum and as a teaching aid will be discussed. Use of a computer will be included.

568. Mathematical Applications in the High School Disciplines/(3).SS.

An examination of mathematical theories with respect to their applications to other high school disciplines such as biology, chemistry, and physics.

569. Special Topics in Mathematics Education/(1-6).SS.

A flexible program of reading, study, planning, and writing designed to meet the needs of individual teachers or groups of teachers in the field of secondary school mathematics. Prerequisite: 18 hours of graduate mathematics education courses.

258. Introduction to Computer Science/(3).F;S;SS.

A study of the basic ideas about computers and their use. The course assumes prior knowledge of FORTRAN programming and makes use of programming as part of the activity. Topics covered include stored-program concepts, data representation and conversion, analysis of algorithms with flowcharts, and related topics.

**259. Advanced Programming/(5).
F;W.**

Compiler languages and their application to nontrivial algorithms—both numerical and nonnumerical.

353. Assembly Language Programming/(4).W;S.

A study of the use of computers in simulation, Monte Carlo methods of analysis, linear programming, and management information systems. Prerequisite: Computer Science 259.

355. Data Structures/(4).S.

A study of stacks, deques, trees, and other structures, together with algorithms for representing and using them. Prerequisite: Computer Science 259; (Computer Science 353 suggested.)

**356. Current Computer Use/(1-6).
On demand.**

This course consists of work done with a cooperating institution which makes use of computers. This work is to be part of the total computer-oriented activity of the cooperating institution so that it will contribute significantly to the student's background in the field. Permission to register must be given by the department chairman.

**357. Research Support/(1-6). On
demand.**

This course consists of assisting in research activities of various types and is aimed at the design and implementation of research which depends on the computer for computations. The student must be directly involved in providing the computer support phase of the research. Permission to register must be given by the department chairman.

**451. Studies in Computer Science/
(4). On demand.**

This course is intended to help the student advance himself (under the direction of an instructor) in the area(s) of his special interest in computer science. *It may be taken only after a minor in computer science is completed.*

Statistics

**380. Statistical Methods I/(4).
F;W;S.**

A study of statistical methodology including organization and presentation of data, probability, statistical distributions, hypothesis testing, simple regression. Emphasis will be on computational procedures rather than theoretical development. Prerequisite: Mathematics 107 or equivalent.

381. Statistical Methods II/(4).W;S.

A continuation of Mathematics 380. Topics covered will include regression, analysis of variance, analysis of covariance and experimental design. Emphasis will be on computational procedures rather than theoretical development. Prerequisite: Mathematics 380.

382. Statistical Computation/(3).S.

Applications of digital computers in statistical analysis through utilization of canned programs. Emphasis will be on data preparation and interpretation of results. The student will program some statistical procedures. Prerequisite: Mathematics 380 and Computer Science 251 or 258.

**421. Nonparametric Statistical
Methods/(3). On demand.**

A study of nonparametric methods in hypothesis testing. Emphasis will be on applications rather than theoretical development. Prerequisite: Mathematics 380.

**422. Linear Statistical Models/(3).
On demand.**

A study of regression analysis, analysis of variance, analysis of covariance and associated tests of hypothesis via least squares theory. Prerequisite: Mathematics 214 and Mathematics 381.

**491-492-493. Probability and
Mathematical Statistics/(3-3-3).
F-W-S.**

A study of probability and statistics based on discrete and continuous sample spaces. Prerequisite: Mathematics 213.

Department of Music

Wayne M. Sheley, Chairman

The Department of Music is a member of the National Association of Schools of Music. The requirements set forth in this catalog are in accordance with the published regulations of the National Association of Schools of Music.

A major in music leading to the Master of Arts degree in public school music consists of 33 to 39 quarter hours, including Music 500, 522, 529, and 531; Administration, Supervision and Higher Education 506 and 535 or 547; Counselor Education and Reading 456; and Psychology 455 or 501 or 502. The major leading to the Master of Arts degree in junior college teaching consists of 33 to 39 quarter hours, including Music 500, 522, and 531 and Administration, Supervision and Higher Education 542 and 544 or 545 or 574. The graduate student must demonstrate proficiency or take courses in music history and literature, theory, applied music, conducting, and music education.

Entrance Requirements and Placement Examinations for Graduate Students

All entering graduate music majors will demonstrate by examination their skills and abilities in music theory, music history and literature, performance major and music education where it applies. Any deficiency noted may require courses or individual study in the area of the deficiency prior to admission to candidacy for the degree.

Comprehensive Evaluation of Musicianship

Before a music major may be accepted for upper division work in music he shall demonstrate satisfactory attainment in musicianship by examinations given by appropriate members of the music faculty. Failure to pass the examinations will necessitate a re-evaluation by the entire music faculty before the student can be accepted unconditionally.

Recitals and Concerts

Student seminar and studio recitals are held each week to provide experience and poise in public performance. Seniors and other advanced students present in-

dividual or joint public recitals to provide further performance skills. Frequent concerts are given by faculty, various musical organizations, and visiting artists.

It is desirable that music majors, undergraduate and graduate, attend all concerts and recitals sponsored by the Department of Music.

Applied Music

Individual music instruction is offered in piano, organ, voice, and all orchestral and band instruments. Courses in applied music are required of all music majors and may be elected for General College credit by students not majoring in music.

Piano. The piano major or principal should develop the ability to sight read, play accompaniments in a musical manner, and perform representative works from all periods of music, from the pre-Bach to the present.

Voice. The voice major or principal should be able to sing on pitch and show musical aptitude. Study will include good posture, relaxation, diaphragmatic breathing, good diction and vocal exercises, and appropriate songs adapted to the student's needs.

Organ. Piano facility which satisfies the instructor is a prerequisite for study in organ. The study includes pedal scales, hymn playing, appropriate selections from the works of Bach, Mendelssohn, Franck, and Widor, as well as contemporary European and American compositions.

Brass and Woodwind Instruments. This study emphasizes proper breath control, embouchure, and position, as well as good tone production and intonation. Materials and literature will be chosen on the basis of the student's ability and progress.

String Instruments. The purpose of string instruction is to promote in the student the basic techniques of good intonation, clarity and refinement of fingering and bowing styles, and the development of tonal beauty. Emphasis is placed upon the importance of phrasing and interpretation.

Percussion Instruments. The student expecting to major in this area should have a background of the basic rudiments in snare drum and sufficient experience and preparation of the other percussion instruments to play a standard band composition. The first year of study emphasizes the snare drum and the twenty-six rudiments along with suitable solo literature. The remainder of the time is devoted to the tympani and other traps and equipment, with the main emphasis placed upon the marimba.

Courses of Instruction in Music

451. Choral Literature/(3). S;SS.

A study of choral literature for mixed chorus, girls' glee club, boys' glee club, small ensembles, and church choirs.

452. Piano Literature/(3).On demand.

The study of the literature for piano from the pre-Bach to the present day through performance, analysis, and recordings.

**453. Concert Band Literature/
(3).On demand;SS.**

A study of the development of the Wind Band and its literature. Significant original compositions and transcriptions with emphasis on 20th century works.

**454. Problems in Elementary
School Music/(3).S;SS.**

Music teaching in the primary and grammar grades; research and demonstrations of methods of teaching elementary school children.

**455. Instrument Repair and
Adjustment/(3).S;SS.**

The repair and care of string, wind, and percussion instruments.

**456. Opera Literature/(3).On
demand; SS.**

Operatic development and literature from the Baroque period to the present day. Representative works will be studied visually and aurally. Attendance at live performances required.

**457. Chamber Music Literature/
(3).SS.On demand.**

Instrumental ensemble music from the early 18th century to the present, with special emphasis on the development of the string quartet as a musical form.

**458. Symphonic Literature/
(3).SS.On demand.**

A comprehensive study of the development of the symphony from the Mannheim school to the present through analysis of selected works.

460. Band Pageantry/(3).W;SS.

A study of the fundamentals of marching, precision drilling, formations, and maneuvering; the planning of football shows and parades.

461. Piano Workshop/(3).SS.

**462. Instrumental Workshop/
(3).SS.**

**469. Music Education
Workshop/(3).SS.**

An intensive course in modern methods of music education for superintendents, principals, supervisors, music teachers, classroom teachers, and physical education teachers.

**470-471-472. Field Studies in
Elementary Music Education/
(3-3-3).F-W-S.**

An examination of the basic methods, materials, activities, and techniques of music education, designed to develop those competencies necessary to carry forward a music program in the public schools. Aimed specifically toward selected in-service classroom teachers who possess some knowledge of and interest in music.

**474. Mountain Dulcimer
Workshop/(3).SS**

**491. Honors Project in
Music/(3).F;W;S.**

Graduate Courses

**500. Bibliography and
Research/(3).F;SS.**

A study of bibliographical problems, types of research, and organization and reporting of research. Required in the first quarter of all beginning graduate music students. *Staff.*

**501. Survey of Music to
1600/(3).F;SS.**

A study of the development of music from that of the ancient Greeks through that of the Renaissance. *Erneston.*

502. Music of the Baroque Era/(3).W;SS.

A comprehensive study of the music of western civilization during the Baroque Era, from the Camerata through Bach and Handel. *Erneston, Johnston.*

503. Music of the Classic and Romantic Periods/(3).S;SS.

A comprehensive study of the music of western civilization during the Classic and Romantic periods, from the Mannheim school through Wagner. *Erneston, Johnston.*

504. Music of the Twentieth Century/(3).S;SS.

A comprehensive study of contemporary music from Impressionism and Realism to the present day. *Erneston, Johnston.* Offered 1974-75.

505. Advanced Conducting/(3).W;SS.

Emphasis upon the critical examination of both choral and instrumental scores, with development of conducting skills necessary in securing the desired effects. *Spencer.*

506. Analytical Technique I/(3).F;SS.

A comprehensive review of theory and the development of techniques for analysis of music from the Baroque to Mozart through counterpoint, melodic structure, harmony, and form. Five hours per week. *Disbrow.*

507. Analytical Technique II/(3).SS.(On demand).

A continuation of Music 506 from Beethoven to early contemporary. Five hours per week. *Disbrow.*

510-511-512. Applied Music/(1-1-1).F-W-S;SS.

One 30-minute individual lesson and six practice hours a week. Before being admitted to graduate standing in applied music,

the student must demonstrate a graduate level of performance before a music faculty committee. *Staff.*

513-514-515. Applied Music/(2-2-2).F-W-S;SS.

Two 30-minute individual lessons and twelve practice hours a week. Before being admitted to graduate standing in applied music, the student must demonstrate a graduate level of performance before a music faculty committee. *Staff.*

516. Music Activities in the Elementary School/(3).F;SS.

Designed for the classroom teacher and covering a five-point program for children; singing, playing, creating, listening, and rhythmic activities. *Fox, Mears, Justice.*

517. Music in Secondary Schools/(3).SS.

A study of the function and role of general music in modern secondary schools, including music curriculum problems, instructional materials, and methods. *Mears, Fox.*

518. American Music/(3).SS.

The development of American music from the Puritan psalm singers to contemporary jazz with particular attention given to those musical concepts and practices which are distinctly American. *Staff.*

519. String Pedagogy/(3).SS.

Fundamental principles in playing and teaching orchestral stringed instruments. Designed for the graduate student who has had little or no training in strings but who wishes to prepare himself for beginning string work. *Dellinger.*

520. Woodwind Pedagogy/(3).SS.

Survey of techniques, practices, and materials for teaching the woodwind instruments. *Spencer.*

521. Brass Pedagogy/(3).SS.

Survey of techniques, practices, and materials for teaching the brass instruments. *Isley.*

**522. Graduate Ensemble/
(0).F;S;SS.**

Participation in one of the instrumental or choral ensembles. *Staff.*

**529. Organization and Supervision
of School Music/(3).S;SS.**

The responsibilities of the music supervisor

in relation to the classroom teacher, the music teacher, and the school administration. *Spencer, Mears, Fox.*

531. Seminar in Music/(3).F;SS.

A review of the philosophy and practice in music education; reading of current studies, articles, books. *Logan, Spencer.*

**548. Independent Study/(1-6).
F;W;S;SS.**

**550. Master of Arts Thesis/(6).
F;W;S;SS.**

Department of Philosophy and Religion

James W. Stines, Chairman

The objectives of the Philosophy and Religion Department are to acquaint students with the religious and philosophical history of mankind, giving special attention to those aspects of tradition having most to do with the shaping of the Western mind; to promote critical examination of philosophical and religious issues; and to promote a desire for advancing the skills and frontiers of knowledge in philosophy and religion and, thus, in every area of human endeavor where truth and the well being of persons are the goals.

In keeping with these objectives an interdisciplinary major and minor in philosophy and religion are offered. Within the framework of these programs one may choose to elect an emphasis in philosophy or religion. For participants in the graduate program a limited amount of graduate work is available, including a nine hour graduate minor. The minor program is designed for students on an individual basis. For further information contact the department chairman.

Courses of Instruction in Philosophy and Religion

Philosophy

**405. Contemporary Issues in
Philosophy and Religion/(4).S.**

A study of the most vital points of interaction between philosophy and religion in the twentieth century.

**410. The Nature of Reality and
Knowledge/(4).W.**

An investigation of the nature of reality, of

knowledge, and of their interrelationship. Prerequisite: Philosophy 188 or 311 or permission of the instructor.

**440. Seminar: Studies in Philoso-
phy/(3).F;W;S.**

An intensive study of one philosopher, philosophical movement, problem, or major idea. The subject of this course will vary and barring duplication of subject matter a student may repeat the course for credit.

Prerequisite: Philosophy 188 or 311 or permission of instructor.

**407. Religious Ideas in Literature/
(3).F.**

A study of the religious ideas in the writings of such men as Milton, Donne, Dante, Browning, Dostoevsky, Faulkner, Beckett, Kafka, Camus, Sartre, MacLeish, and T. S. Eliot.

404. Religion Colloquium/(3).S.

Selected projects in religion. The projects will vary and barring duplication of content a student may repeat the course for credit.

440. Seminar/(3).F;W;S.

An intensive study of special problems, topics, or issues related to the study of religion. The subject matter of this course will vary and barring duplication of subject matter a student may repeat the course for credit.

Department of Physics

Walter C. Connolly, Chairman

A graduate (M.A.) minor in physics consists of 9 quarter hours selected from physics offerings numbered 450 and above.

Courses of Instruction in Physics

**450. Seminar/(Maximum credit 3).
F;W;S.**

A study of current physics research results.

Physics/(3-3,3).F-W,S.

An introduction to Quantum Mechanics and the application of quantum ideas to nuclear physics, statistical mechanics, and solid state properties of matter. Prerequisite: Physics 301, 303, 320. Lecture three hours.

453. Electronics/(4).W.

A study of the basic components, circuits, and systems encountered in electronic instrumentation. Special emphasis is given to the transistor, field effect transistor (FET), silicon controlled rectifier (SCR), and linear integrated circuits. Circuits and instruments for making quantitative measurements of the physical properties of biological and physical systems will be used. Prerequisite: Physics 101-102, 103 or Physics 150-151, 152. Lecture three hours, laboratory three hours.

**470, 471. Physics for Teachers/
(3,3).SS.**

A study of the fundamental law of physics with emphasis on demonstrations and methods. Designed for those currently teaching science and for those planning to teach science. Lecture three hours.

**488. Special Topics Seminar/(3).
On demand.**

A seminar devoted to single topics such as: relativity, ultrasonics, advanced thermodynamics, research techniques, optics, etc. Prerequisite: Consent of instructor.

464-465, 466. Advanced Modern

Department of Political Science

Richter H. Moore, Jr., Chairman

The Department of Political Science requires as a prerequisite for graduate work an undergraduate major or minor in political science. The academic Master of

Arts degree requires a minimum of 45 quarter hours of graduate credit, including Political Science 500, 501, and 6 quarter hours for the thesis which is required. In addition to the course work, each candidate will demonstrate proficiency in reading a foreign language or using statistics and computer science as a research tool. In addition to the academic Master of Arts degree, a student may earn a Master of Arts degree with a major in political science in the program for secondary school teachers or the program for junior college teachers.

Courses of Instruction in Political Science

451. Governments and Politics of Asia/(3).F.

A study of the policies and institutions of the major Asian governments. Primary emphasis is given to the political evolution and current implementation of the major internal and foreign policies of Japan, China, and India.

452. Latin American Government and Policies/(3).F.

The structure and dynamics of Latin American political institutions. Attention is given to formal institutions and to basic social, economic, and cultural factors.

454. The Electoral Process/(3).S.

An examination of the factors which contribute to an electoral choice. Both sociological and psychological influences are considered.

455. American Political Thought/(3).W.

A study of the main currents of political thought in the United States from 1776 to the present.

457. International Law/(3).W.

An examination of the nature, scope, sources and sanctions of international law; the rights and duties of states and individuals.

458. International Organizations/(3).S.

An examination of the development and functioning of world organizations with special emphasis on the United Nations and its specialized agencies.

460. American Foreign Policy/(3).S.

A study of the political process by which contemporary foreign policy is made and executed.

462, 463. Constitutional Law of the United States/(3,3).W,S.

An intensive study of the court decisions which have contributed to the contemporary interpretation of the American Constitution.

466. Administrative Law/(3).S.

A study of administrative powers and procedures in the U.S. with special attention to the legal and administrative methods of achieving a responsible bureaucracy and of balancing public interest with private rights.

467. Public Personnel Administration/(3).W.

A study of public personnel systems in the U.S. with major concentration on the national civil service system. Special emphasis is given to current research in the areas of

leadership, informal organization, motivation, and small group theory.

470. Political Sociology/(3).S.

(Same as Sociology 470)

473. Politics of Developing Nations/(3).W.

An examination and analysis of the political processes in the developing areas of the world, consideration of stresses of change, the international interactions and behavior of nations in their struggle toward political modernization.

475. The Governments and Politics of Western Europe/(3).F.

A survey of the governmental institutions and political process in the parliamentary democracies of Western Europe with special emphasis on Great Britain, Federal Republic of Germany, and France.

476. Governments and Politics of Eastern Europe/(3).W.

A survey of the governmental and party institutions, practices, and procedures in the Soviet Union and Eastern Europe.

478. Governments and Politics of Africa South of the Sahara/(3).S.

A study of the governments and political institutions, domestic and international politics of the independent states of subSaharan Africa.

480. Internship in Public Affairs/(3-6).F;W;S;SS.

Field work in the office of a governmental agency; city, county, state, or national. Under certain circumstances, it might be the office of a political party organization or in that of some organized pressure group. The

type of internship and place of organization in which it is taken must be satisfactory to the student and to the department. A research paper in which the student correlates his academic knowledge with his practical experience is required.

481. The Political Novel/(3).W.

An examination of the contributions of the novelist in creating a political model that can be used to effectively explain and describe political behavior.

482. Political Leadership/(3).W.

An examination of the factors responsible for the development of the political leader; the influence of third persons, health, family background, personality, social class, and accidents of history that place a particular individual in a position to assume leadership.

490. Seminar: Scope and Methods of Political Science/(3).W.

Graduate Courses

500. Bibliography and Research/(3).F.

Hoffman.

501. Reading and Research in Political Behavior/(3).W.

A comparative analysis of the factors influencing political behavior, political socialization, and political participation. *Hoffman.*

504. Seminar in American Government and Politics/(3).F;SS.

Special investigation of selected topics in American government and politics. The topic will vary from year to year and barring duplication may be repeated for credit. *Moore, Sutton.*

505. Reading and Research in Empirical Political Theory/(3).S.

An in-depth analysis of political belief systems, recent democratic theories, and political personality. *Hoffman.*

508. Reading and Research in Public Law and Judicial Behavior/(3).S.

An examination of the multiple roles of law and the judicial system in the formulation and execution of public policy to include the role of the judiciary in politics and government with emphasis on variables affecting judicial decision making. *Moore.*

510. Democratic and Totalitarian Systems/(6).SS.

A comparative analysis of constitutional democracy and totalitarian systems. Offered as a summer institute. *Hughes, Moy.*

513. Readings and Research in International Relations/(3).W;SS.

This course will concern itself with indepth treatment of the problems and policies of developing nations, the issues of colonialism, imperialism, nationalism, and an examination of current methodological trends in the exploration of these problem areas. *Barghothi, Moy.*

515. Problems of Public Administration/(3).S.

An examination of selected problems in

public administration with emphasis on analytical case studies.

517. Geographic Aspects of World Affairs/(3).S.

A geographic analysis of major world movements and events associating the physical environment with social, political, racial factors. *Yoder.* (Same as Geography 523)

525. Seminar in Comparative Government and Politics/(3).F;SS.

An examination of selective areas of comparative governments. The topic will vary from year to year and barring duplication may be repeated for credit. *Moy.*

535. Problems in State and Local Government/(3).W.

Research on selected topics and American state and local government. The topic will vary from year to year and barring duplication may be repeated for credit. *Williamson.*

540. Seminar/(3).On demand.

Staff.

548. Independent Study in Political Science/(1-6).F;W;S;SS.

550. Master of Arts Thesis/(3-6).F;W;S;SS.

Department of Psychology

Walter T. Snipes, Chairman

The Master of Arts degree in general-theoretical psychology consists of 45 quarter hours including 6 quarter hours credit for research and thesis. Required courses include Psychology 457, 458, 500, 534, and 550. A candidate must take any four of the following courses: Psychology 466, 528, 529, 530, or 531. A reading knowledge of an approved foreign language is required of all candidates for the degree. The candidate may select a minor field in sociology or the physical or biological sciences. Within the general-theoretical framework, a candidate may

choose to pursue a program for junior college teaching or rehabilitation psychology and take 54 quarter hours credit rather than completing a thesis. Specific courses in the junior college program include Psychology 457, 458, 500, and 534, as well as Administration, Supervision and Higher Education 544. The candidate will choose *four* of the following: Psychology 466, 528, 529, 530, or 531; and *one* of the following: Administration, Supervision and Higher Education 544, 545, or 574. The candidate must also have an undergraduate major in psychology. The rehabilitation psychology program consists of 54 hours including 6 quarter hours for a one quarter internship. Core courses include Psychology 500 or Counselor Education and Reading 500, Psychology 375, 376, 377, 460, 532, 537, and 554. The minor for this program is in junior college teaching and the student should select 6 hours within this area. The Master of Arts degree in clinical psychology consists of 70 quarter hours of graduate credit including 6 quarter hours of research and thesis and 12 quarter hours of internship. Required courses include Psychology 500, 526, 536, 537, 550, 551, 552, 553, 554, 558, 559, 560, and 561. In addition to course work, thesis, practicum, and internship, each candidate shall demonstrate reading proficiency in an approved foreign language.

Courses of Instruction in Psychology

450. Psychology of Personality/ (3).F.

A study of factors involved in the development of personality. Prerequisite: Psychology 201.

451. Social Psychology/(3).W.

A study of social implications and applications of group stimulation, response, interaction, change, and sometimes disintegration.

452. Abnormal Psychology/(3).S.

A study of various abnormal phases of behavior; prevention and treatment of certain social-emotional problems; examination of recent clinical and experimental findings. Prerequisite: Psychology 201 or 303.

455. Advanced Educational Psychology/(3).F;W;S.

The psychology of learning as it applies to the learner, the learning process, and the teaching situation.

457. Physiological Psychology II/ (3).S.

An in-depth examination of the physiological correlates of behavior. Emphasis placed on sleep and dreams, memory, emotions, hunger and thirst, and sexual behavior. Prerequisite: Psychology 321.

458. History and Systems of Psychology I (3).F.

An overview of the origins and development of psychological concepts, movements and fields of study existing before and during the early 1900's. Emphasis placed on an understanding of the philosophical thought lying behind current psychological systems. Prerequisites: 12 hours of psychology.

459. History and Systems of Psychology II/(3).W.

A depth study of twentieth century psychological systems and theories. Emphasis placed on an understanding of current psychological issues, formulations, and methodologies. Prerequisite: Psychology 458.

460. Psychology of Disability/(3).S.

Examination of the physical, psychological, and sociological problems associated with handicapping conditions. Prerequisite: Psychology 201, 375 or permission of instructor.

461. Field Work in Vocational Rehabilitation/(3).S.

Supervised field placement in a rehabilitation facility or district office to expose the student to contemporary problems and issues of the physically, mentally, and socially handicapped and provide him an opportunity to apply the basic principles of vocational rehabilitation. Prerequisite: Permission of instructor.

466. Comparative Psychology/(3).S.

Covers psychological processes in infrahuman organisms, the place of animal experimentation in psychology and animal research. Prerequisites: Psychology 201 and Mathematics 380 or equivalent.

470, 471, 472. Industrial and Organizational Psychology/(3,3,3).F,W,S.

A survey of potential and actual applications of psychological principles and methods to the problems of business and industry. Attention given to the structure and dynamics of organization, labor management relations, and employee and consumer behavior. Prerequisite: Psychology 201.

475. Behavior Modification/(3).W.

Operant and classical conditioning procedures and other techniques derived from the learning laboratory applied to personal, interpersonal, and learning problems. Prerequisite: Psychology 364.

Graduate Courses

500. Research Problems/(3).F;SS

A study of research problems, types of research, organization and reporting research. Required in the first quarter of graduate study. *Staff.*

502. Psychology of Adolescence/(3).S.

A consideration of the physical, intellectual, social, and emotional changes expected during adolescence. Prerequisite: 9 hours of psychology or permission of instructor. *Snipes, Crouch, Knight, Deni.*

503. Child Psychology/(3).W.

A study of the principles of development from conception to puberty. Emphasis will be placed upon emotional, intellectual, social, and physiological facets of behavior which have particular implications for teachers, counselors, and librarians. *Crouch, Snipes, Long, Deni.*

512. Psychology of the Socially and Emotionally Maladjusted/(3).W.

Characteristics, identification, and programs of prevention and re-education for both the emotionally disturbed and the socially maladjusted. Credit for both Childhood Education 526 and Psychology 512 is not permitted. *Wesley, Moss, McDade.*

514. Psychological and Educational Testing/(3).F;W;S;SS.

(Same as Counselor Education and Reading 514)

519. Analysis of the Individual/(3).W.

An application of psychological principles and guidance techniques of self-appraisal of the personality of others. Prerequisite: Psychology 450. *Wesley, Levin.*

521. Vocational Planning for the Handicapped/(3).SS.

(Same as Childhood Education 521)

526. Psychological Assessment I/(3).F;W.

A study of the development, standardization, administration, and interpretation of the Wechsler Scales, Stanford-Binet, and selected other individually administered psychometric instruments. Supervised practice in administration. Prerequisite: Psychology 514 or equivalent. *Johnson, Levin, McDade, Maris.*

528. Theories of Learning/(3).F.

A course designed to promote understanding of the theories of learning of historical and current value. Prerequisite: Psychology 364 or 455. *Brigner, Fox, Moss, Terrant.*

529. Advanced Experimental Psychology/(3).S.

The application of experimental methods to a variety of psychological phenomena. Emphasis will be placed upon each student conceiving, conducting, and reporting an experiment. Prerequisite: Psychology 365 or equivalent. Lecture two hours, laboratory two hours. *Brigner, Fox, Terrant.*

530. Theories of Personality/(3).S.

A critical study of individual theories of personality structure and development with their characteristic research and influence. *Clark, Maris, McDade, Long.*

531. Advanced General Psychology/(3).F.

A critical study of some of the major experimental and research findings and methods in contemporary psychology. Prerequisites: Psychology 202 and 9 hours psychology. *Brigner, Duke, Moss.*

532. Evaluation of Exceptional Children/(3).F.

A study of special diagnostic procedures with children who have physical, intellec-

tual, sensory impairments. Prerequisite: Counselor Education and Reading 456 or equivalent. *Winford, Knight.*

533. Rehabilitation of Persons with Neurological Defects/(3).W.

Special considerations appropriate to the rehabilitation of persons having a variety of neurological syndromes including epilepsy, "minimal brain dysfunction," cerebral palsy, aphasia, and similar problems. Prerequisite: Psychology 377 or permission of the instructor. *Knight.*

534. Advanced Statistics/(3).W.

Statistical estimation, inference, hypothesis testing, scaling, and the use of quantitative models in design and analysis of research. Prerequisite: Mathematics 381 or equivalent. *Dowell, Fox, Terrant.*

535. Advanced Abnormal Psychology/(3).F.

A critical examination of major theories and data concerning the emotionally handicapped. Emphasis placed on recent findings and experimental research. Prerequisites: Psychology 450 or 530, 452 or permission of instructor. *Johnson, Maris.*

536. Theories of Psychotherapy/(3).S.

A critical evaluation of major theories of psychotherapy, including cross cultural studies, current applications, and research findings. Prerequisite: Psychology 535 and 537. *Levin, McDade.*

537. Behavior Change I—Behavior Therapy/(3).W.

Theory and practice of learning principles applied to modifying maladaptive behavior in the therapeutic setting. Prerequisite: Psychology 551. *Clinical Staff.*

540. Seminar in Psychology/(3).S.

Consideration of some of the contemporary research issues in psychology. Opportunity for graduate students to consider a particular aspect of psychology in depth. Topics vary from year to year depending upon the

interests of students. Prerequisite: Graduate status or permission of instructor. *Staff.*

**548. Independent Study/(1-6).
F;W;S;SS.**

Staff.

**550. Master of Arts Thesis/(3-6).
F;W;S;SS.**

Staff.

**551, 552, 553. Clinical Practicum
I/(3,3,3).F,W,S.**

Introduction to interdisciplinary team approach to problems in vocational and emotional areas; directed observation of staffings, interviews, psychotherapy, and psychological assessment at the Psychological Services Center. Prerequisite: Admission to MA program in clinical psychology. *Clinical Staff.*

554. Clinical Practicum II/(3).F.

Progressive assumption of clinical responsibility in psychotherapy, psychological testing, referral procedures; supervision in these areas by licensed psychologists at the Psychological Services Center or other designated practicum locations. Prerequisite: Clinical Practicum I. *Clinical Staff.*

**555. Advanced Developmental
Psychology/(3).F.**

Study at advanced level of developmental stages throughout the course of life, from conception through old age. Special attention will be given to current theories, to methodology, and to illustrative areas of research. Prerequisite: Psychology 205 and

preceded by, or taken concurrently with, Psychology 457. *Fox, Snipes.*

**556. Experimental Analysis of
Mental Deficiency/(3).W.**

Research, etiology, diagnosis, prognosis, and behavior modification in the area of mental deficiency. Prerequisite: Psychology 555. *Johnson.*

557. Clinical Psychology/(1).F.

Seminar on issues in professional clinical psychology; licensing, ethical and legal considerations in clinical psychology, role relations with other professions. Prerequisite: Clinical Practicum I. *Clinical Staff.*

**558. Psychological Assessment II/
(3).W.**

Theory, research findings, and clinical applications of major projective techniques, with emphasis on Rorschach and TAT. Prerequisite: Psychology 526, 535. *Levin, McDade.*

**559. Psychological Assessment
III/(3).F;S.**

Advanced supervision in techniques of individual psychological evaluations, including interview techniques, behavioral observations, and assessment of personality and intellectual functioning in persons with behavior disorders; the writing of meaningful psychological reports, including appropriate recommendations for treatment or referral. Prerequisites: Psychology 526; Clinical Practicum I. 551, 552, 553. *Levin, McDade.*

560, 561. Internship/(6,6).W,S.

Six months full time placement in mental health setting under supervision of a licensed psychologist; psychological evalua-

tion, individual and group psychotherapy; work with interdisciplinary team; consultation with community agencies, schools, and work in institutional settings. Prerequisite: Completion of course work in MA Clinical Psychology program. *Clinical Staff.*

Department of Science

F. Ray Derrick, Coordinator

A graduate student who wishes to complete a broad major in science in preparation for teaching either in the elementary school or the secondary school may develop an individualized program by selecting appropriate courses from earth science, biology, chemistry, and physics.

The elementary teacher may develop a concentration consisting of 18 to 24 quarter hours, nine hours of which must be in one field, preferably general science. (For the elementary teacher, the required course in bibliography and research is CR 500.)

The secondary teacher develops a major consisting of at least 36 hours, 12 to 18 hours of which should be in one field which includes also the course in bibliography and research. The remaining courses should be selected from the other fields in the sciences. Professional courses required for certification include CR 456. Measurement and Assessment; AH 506. Curriculum Construction; AH 547. Social Foundations of Education, or AH 535. Philosophy of Education; Psychology 455. Advanced Educational Psychology, or Psychology 502. Psychology of Adolescence.

Department of Secondary Education

N. Andrew Miller, Chairman

The Department of Secondary Education offers undergraduate and graduate courses leading to certification in the various fields of instruction in the secondary school. In addition to meeting the minimal requirements for certification, the department maintains programs of instruction, research, and field services for the continuous improvement of curriculum development, educational materials, and methods of teaching.

Courses of Instruction in Secondary Education

**453. Art Education
Workshop/(3).SS;Ex.**

(Same as Art 453.)

**462. Reading on High School and
Advanced Levels/(3).F;W;S;SS.**

Reading problems encountered on the high school level; reading in the content areas of

the curriculum; the total school responsibility in reading improvement. Opportunities for practical application provided.

Graduate Courses

510. Extracurricular Activities/(3). F;SS.

A study of extracurricular activities which modern schools are expected to carry out as a part of their educational program. *Randall.*

515. Organizing and Planning Student Teaching/(3).F;SS.

A study of the origin and development of student teaching, including present status and trends, experiences prior to student teaching, selection of schools and supervising teachers, selection and placement of student teachers. *Staff.*

516. Supervision of Student Teaching (3).S;SS.

A study of general techniques of a supervising teacher, including observation, guiding student teachers in planning, orientation of student teachers, student teacher participation, and evaluation. Available as a workshop by invitation. *Staff.*

529. Organization and Supervision of School Music/(3).W;SS.

The responsibilities of the music supervisor in relation to the classroom teacher, the music teacher, and the school administration. *Spencer, Mears, Fox.* (Same as Music 529.)

548. Independent Study/(1-6). F;W;S;SS.

550. Master of Arts Thesis/(6).F;W;S.

562. Secondary School Curriculum/(3).SS.

A study of the modern secondary school curriculum; development, recent trends, and organization; including the philosophy and psychology upon which these practices are based. *Miller, Hooks.*

565. Selected Topics/(3 or 6). F;W;S;SS.

Subject matter may vary from term to term depending on student interest and need. A student may enroll more than once in a selected topics course provided that the content does not duplicate that of the previous course. Limit of 6 hours credit. *Staff.*

576. Internship for Supervising Teachers/(3).F;W;S.

A program designed for regularly employed public school teachers in which experiences will be provided to enable a supervising teacher to do a better job of supervising the work of a student teacher. *Staff.*

580. History of American Education/(3).S;SS.

A study of the historical development of education in the United States. Special emphasis is given to educational concepts and practices as they relate to political, social, and cultural developments in the growth of a system of public education. *Melton.*

Department of Social Science

Peyton Albert Hughes, Coordinator

A graduate student who wishes to complete a broad major in the social sciences in preparation for teaching either in the intermediate grades (4-9), secondary school, or junior college may develop an individualized program by selecting courses from history, geography, political science, sociology, and economics.

The elementary teacher may develop a concentration consisting of 18 to 24 quarter hours, nine hours of which must be in one field. (For the elementary teacher, the required course in bibliography and research is CR 500.)

The secondary teacher develops a major consisting of at least 36 hours, 12 to 18 hours of which should be in one field with the remainder selected from among other fields in the social sciences. The course in bibliography and research must be among the courses in the concentration. Professional courses required for certification include CR 456. Measurement and Assessment; AH 506. Curriculum Construction; AH 547. Social Foundations of Education, *or* AH 535. Philosophy of Education; Psychology 455. Advanced Educational Psychology, *or* Psychology 502. Psychology of Adolescence.

The junior college teacher develops a major consisting of 36 to 48 hours, 18 hours of which should be in one field which includes the course in bibliography and research. The remainder should be selected from two related fields in the social sciences.

Professional courses required for preparation to teach in a junior college are AH 542. Instruction Program of the Two-Year College; AH 544. Seminar on the Two-Year College, *or* AH 545. Practicum in College Teaching, *or* AH 574. Teaching Internship in the Two-Year College.

Department of Sociology and Anthropology

Alfred M. Denton, Jr., Chairman

The major for the master's degree in the junior college teacher program consists of 36 quarter hours in sociology and anthropology, 6 hours of which may be for a thesis if the candidate elects to write a thesis. The total number of hours required in the program is 45 if the candidate chooses to write a thesis. If the candidate chooses not to write a thesis, the major in sociology and anthropology is 36 quarter hours and the total program consists of 54 quarter hours.

The major for the master's degree in the program for the preparation of secondary school teachers consists of 33 quarter hours in sociology and anthropology, 6 hours of which may be for a thesis if the candidate elects to write a thesis. The total number of hours required in the program is 45 if the candidate chooses to write a thesis. If the candidate chooses not to write a thesis, the major in sociology and anthropology is 36 quarter hours and the total program consists of 54 quarter hours.

In either of the two graduate programs, the required courses in sociology are 500, Bibliography and Research; 505, Theory Construction; and 525, Contemporary Sociological Theory. Mathematics 381, Statistical Methods II, is required and the candidate will receive sociology credit. If the candidate has not had Math-

ematics 380, Statistical Methods I, and Sociology 461, The Development of Sociological Theory, he must take them and may receive graduate credit for 461.

Courses of Instruction in Sociology and Anthropology

Sociology

450. Race Relations/(3).F.

Analysis of intergroup relationships; the bases of conflict, accommodation, and assimilation; the nature and consequences of prejudice and discrimination; evaluation of proposals for reduction or elimination of prejudice and discrimination. Prerequisite: Sociology 120 or 201.

451. Social Psychology/(3).W.

A study of the behavior and experience of the individual in social contexts.

455. Social Change/(3).F;W;S.

A review and analysis of modernization of society, the initiation and processes of change, and the effects of change on the social structure and social institutions.

461. The Development of Sociological Theory/(3).W;S.

Development of sociological theory from Auguste Comte (19th Century) to World War II.

470. Political Sociology/(3).S

Social influences on political behavior; the relationship between political and other institutions. (Same as Political Science 470).

480. Sociology of the Family/(3).S.

The origin and development of the family as a social institution; the contemporary family in various cultures; the relationship of the family to the economic, political, religious, and educational institutions in American society.

Graduate Courses

500. Bibliography and Research/(3).W.

Brown, Keeter.

502. Concepts in Sociology/(3).F;SS.

Systematic survey and critical analysis of selected sociological concepts and theories. *This course is for graduate students who have only a limited background in sociology. Prerequisite: Permission of instructor or department chairman. Denton, Keasey, Keeter.*

505. Theory Construction/(3).F.

This course will provide the tools for analyzing both the classical and contemporary forms of social theory and aid students in the development of their own theories and conceptual models as part of an integrated research process. The aim is to provide a background in the logic, structure, and usage of sociological theory. Required of all M.A. candidates. Prerequisite: Sociology 461 or equivalent. *Brown, Wise.*

508. Urban Sociology/(3).W.

Urbanism as a way of life. Growth and development of urban areas, urban social organization, change and problems, ecological patterning, urban planning and social controls. *Keeter.*

510. Social Structure/(3).S.

An analysis of social stratification, its nature and function, caste, estates, classes, rank,

and prestige; community power structure; bureaucratic organization. *Denton, Brown.*

515. Complex Organizations/(3).F.

An examination of theories of large scale organizations with a substantive, comparative analysis of types such as bureaucratic, prison, hospital, industrial, scientific, and voluntary organizations. *Wise.*

520. Demography/(3).W.

A systematic survey and analysis of major theories of population growth and change. Intensive analysis of world population trends. *Denton, Brown.*

525. Contemporary Sociological Theory/(3).S.

A review and assessment of the works of leading contemporary sociologists with critical analysis centering around the nature of sociological explanation. *Keeler.*

540. Selected Topics in Sociology/(3).On demand.

Study, research, and writing in selected areas. A student may enroll in this course up to three times for a total of 9 hours, provid-

ing the course content is nonduplicating. Prerequisite: Permission of instructor.

**548. Independent Study/(1-6).
F;W;S;SS.**

**549. Field Experience; Internship/
(3-6).On demand.**

**550. Master of Arts Thesis/(3-6).
F;W;S;SS.**

Anthropology

**465. Folk and Peasant Cultures of
the Modern World/(3).S.**

Descriptive and theoretical analysis of modern folk and peasant cultures in different areas of the world. Emphasis on problems of social change and urbanization.

**540. Selected Topics in Anthropol-
ogy/(3).On demand.**

Study, research, and writing in selected areas. A student may enroll in this course up to three times for a total of 9 hours, providing the course content is nonduplicating. Prerequisite: Permission of instructor.

Department of Speech

Charles E. Porterfield, Chairman

A graduate program leading to the Master of Arts in speech pathology is offered. To enter this program a student must have completed a minimum of 18 quarter hours in courses acceptable toward certification by the American Speech and Hearing Association. To receive this degree the applicant must meet the academic requirements for certification by A.S.H.A. This stipulation may require a student to take more than 45 hours including a thesis or 54 hours without thesis, the minimum required of all graduate students. Consult the department for further details.

A minor in speech and drama consists of a minimum of 6 quarter hours selected from 456, 462, 463, 464, 470, 475, 480, 481, and 482.

Courses of Instruction in Speech

450. Rehabilitation of Articulatory Defects/(3).W.

Study of etiologies, diagnosis, and treatment. Prerequisite: Speech 304 or permission of instructor.

451. Rehabilitation of Voice Disorders and Cleft Palate/(3).S.

Study of etiologies, diagnosis, and treatment of these and related disorders. Prerequisite: Speech 304 or permission of instructor.

452. Rehabilitation of Stuttering and Allied Disorders/(5).F.

Review of modern theories and therapies; nature, causes, development diagnosis, and treatment of stuttering. Prerequisite: Speech 304 or permission of instructor.

453. Audiometric Testing/(3).F;S.

A study of the fundamentals of audiometric testing; the nature, causes, and diagnosis of hearing difficulties; programs and methods employed in the conservation of hearing. Supervised practice in basic audiometric procedures.

456. Creative Dramatics/(3).On demand.

A course designed to aid the potential teacher in using drama as a creative teaching technique. Practice in selecting and acting out stories and poems. Not offered in 1973-74.

457. Professional Standards and Procedures/(1).F;W;S.

The ethical responsibility of the professional in speech with special consideration given to nonacademic requirements and practices. May be repeated for a total of 2 hours. Prerequisite: Permission of instructor.

458. Clinical Practice in Speech Correction/(1-3).F;W;S;SS.

Supervised observation, planning, and practice in therapy. A minimum of 30 hours in the clinic is required for each academic hour of credit. May be repeated for a total of 6 quarter hours. Prerequisite: Permission of instructor.

459. Student Practice in Speech/(6).F;W;S.

Experience in the practice of speech correction in a school setting under supervision approved by the Director of the Speech Clinic. Required of students seeking certification as a special education teacher of speech and hearing. Thursday afternoons, 3:30 to 5:00, must be kept free for critiques with the supervising clinician. Prerequisite: Speech 458 or consent of instructor.

460. Speech Problems of Exceptional Children/(3).F;W;S;SS.

Speech problems associated with mental retardation; neuromuscular disorders, hearing loss. Prerequisite: Speech 304 or consent of instructor.

461. Speech Correction for the Classroom Teacher/(3).F;SS;Ex.

A survey of the speech and hearing problems of school children. Required in majors in speech education who have not had Speech 304.

462. Educational Theatre Techniques/(3).On demand.

Designed to teach practical production techniques to those who produce plays in high schools and junior high schools.

463. Acting III/(3).S.

An in-depth study of the creating of a role and analysis of character. Prerequisite: Speech 203, 306 and previous participation in at least one production of the University Theatre and/or by permission of the instructor.

**464. Advanced Play Directing/
(3).W.**

Study of how to correlate the director's analysis of the script with the playwright's intention, the stage facilities and the actor. Forms of theatre presentation other than proscenium will be explored. Prerequisite: Speech 203, 302, and 306, and participation in at least one University Theatre production, or with the permission of the instructor.

**466. Introduction to Hearing
Rehabilitation/(3).W.**

Survey of auditory training procedures, methods of amplification, and the teaching of speech reading to children. Prerequisite: Speech 453 or consent of instructor.

**470. Theatre Organization and
Management/(2).F.**

A study of the business procedures in the theatre including box office, publicity, and the handling of the house. Laboratory work in these areas on current productions. On demand.

**475. Modern Forensic Program/
(3).On demand.**

Designed to prepare students to conduct a forensic program including planning, coaching, and judging at the secondary level.

**476. Anatomy and Physiology of
the Receptors and Voice
Mechanism/(3).F;SS.**

For special education majors and speech majors. The study of the organs and tissues involved in human communication, normal and defective.

**479. Speech Composition/(3).On
demand.**

Intensive practice in composition and delivery of various types of speeches for different

occasions. Emphasis on speech structure and oral style.

480. Communication Theory/(3).F.

Treats listening theory, discussion theory, general semantics, the philosophy of measurement and new dimensions in speech as reported in the literature of the field.

**481. History and Criticism of
American Public Address—I/
(3).S.**

A critical study of American speakers from the Revolutionary period to 1865. Emphasis is given to the rhetorical craftsmanship exhibited in the speeches and the affect of the speeches upon American history. Offered 1974-75.

**482. History and Criticism of
American Public Address—II/
(3).S.**

A critical study of American speakers from 1865 to 1920. Emphasis is given to the rhetorical craftsmanship exhibited in the speeches and the affect of the speeches upon American history. Offered 1974-75.

Graduate Courses

**500. Research and Bibliography/
(3).On demand.**

A study of the procedures designs and methods of reporting in speech research. Required in the first quarter of graduate study. *Staff.*

**501. Development of Language
and Speech/(3).F.**

Language growth from the first vocalization of the expression of abstract thought, including a consideration of factors that interrupt or hinder language acquisition, methods of encouraging development, and guidance for parents. Prerequisites: Speech 305,

and 451 or 452 or consent of instructor.
Swem.

502. Psychology of Communication/(5).W.

A study of the origin of speech and language, the psychological aspects of speech, the interrelationships between speech and personality. *Meador.*

503. Rhetorical Theory/(3).On demand.

Study of classical, medieval, and modern rhetorical theoreticians from Corax to Whately. *Porterfield.*

508. Advanced Clinical Practicum/(1-3).F;W;S;SS.

Supervised clinical practice requiring a minimum of 35 hours in the clinic for each hour of credit. Emphasis is on evaluating and improving both the student's techniques and his interpersonal relationships. May be repeated for a maximum of 9 quarter hours. Prerequisite: Speech 458 or consent of instructor. *Staff.*

510. Rehabilitation of Language Disorders in Children/(5).S.

A survey of causes, principles of differential diagnosis, and treatment. Prerequisite: Permission of instructor. *Swem.*

515. Rehabilitation of Hearing I/(3).W.

Study of the physics of sound, hearing disorders, auditory training, and methods of amplification. Prerequisite: Speech 453 or permission of instructor. *Meador.*

516. Rehabilitation of Hearing II/(3).S.

Study of the problems involved in speech reading, methods of instruction, preparation of lesson plans for children and for adults. Prerequisite: Speech 515 or permission of instructor. *Meador.*

520. British Public Address/(3).On demand.

Historical-critical study of leading British speakers from Pitt to Churchill with emphasis upon how their speaking affected English history. *Auston.*

522. Contemporary Public Address/(3).On demand.

Critical analysis of outstanding speakers of the 20th century with special reference to the influence of their rhetoric on the issues of the period. *Porterfield.*

530. Linguistic Foundations of Speech/(3).On demand.

Study of structural linguistics, the evaluation of language, and the theories of the development of spoken language in the race. *Auston.*

531. Semantics/(3).On demand.

Study of the psychology of meaning in language with special reference to emerging disciplines and theories. *Auston.*

535. Voice Science/(3).On demand.

The psycho-physics of speech, experimental phonetics, methods and levels of measurement in speech. *Meador, Swem.*

540. Seminar in Speech Pathology/(3).On demand.

Reports of research projects, recent developments, current literature and trends. Prerequisite: Consent of instructor. May be repeated for a maximum of 9 hours. *Staff.*

545. Methods of Diagnosis/(1-2).F;W;S;SS.

A combination of study and practice in the procedures and techniques involved in the diagnosis of speech disorders, preparation of case history and speech evaluation reports. Problems of sharing information with other disciplines. Observations in other dis-

ciplines. Two hours of lecture and discussion, and for each additional hour of credit a two hour laboratory period consisting of observing and participating in both diagnostic procedures and staffing. May be repeated for a maximum of 6 hours total credit. Prerequisite: Speech 450, 451, 452, or consent of instructor. *Meador.*

548. Independent Study/(1-6).

F;W;S;SS.

Graduate students with an approved subject of investigation may register for this course. May be repeated for a maximum of 6 quarter hours.

550. Master of Arts Thesis/(6).

F;W;S;SS.



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